

Ministry of Foreign Affairs

IOB Evaluation

Tackling major water challenges Policy review of Dutch development aid policy for improved water management, 2006-2016

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Preface

Improved water management is a priority of the development aid policy of the Ministry of Foreign Affairs of the Netherlands. It is a complex field of Dutch foreign policy that must deliver on global commitments in different national and local contexts, and also involves other parts of the Dutch government and water sector. This review gives insights into how the Dutch aid policy was carried out, and how effectively and efficiently it was implemented. In doing so, it distinguishes water management in agriculture, (sub) national water management and transboundary water management. In addition to these thematic areas, the review studies the integration of cross-cutting policy themes: climate change, environment, governance, gender and women's participation. It also assesses the contribution to the overarching policy objective of poverty reduction. The involvement of the Dutch water sector is also reviewed.

The policy review was undertaken by a three-member IOB team led by the IOB coordinating policy evaluator Rita Tesselaar. The other members were Stephen Turner, independent consultant, and Pim de Beer, IOB policy evaluator. Among the information sources for the review were four IOB country case studies conducted by Stephen Turner, together with the other members of the IOB team and a national expert for each of these four studies. The country case studies were published in separate reports.

IOB policy evaluator Joep Schenk contributed to the initial design of the policy study and information gathering, and later as peer reviewer. Ferko Bodnár, IOB coordinating policy evaluator, contributed as peer reviewer, and Antonie de Kemp, IOB strategic policy evaluator, supervised the study.

Special thanks go to members of the Reference Group of the policy review for their comments on draft versions of the country case studies and the main report. The reference group comprised Maarten Gischler and Aart van der Horst, thematic experts, Inclusive Green Growth Department, Ministry of Foreign Affairs; Willem Mak, Deputy Programme Director for international water policy, Ministry of Infrastructure and Water Management; Dennis van Peppen, manager water programmes, Netherlands Enterprise Agency; Eelco van Beek, Professor of Water Resources Development, University of Twente; Pieter van der Zaag, Professor of Integrated Water Resources Management, IHE Delft Institute for Water Education; Linden Vincent, Emeritus Professor of Irrigation and Water Engineering, Wageningen University; Christine Sijbesma, Associate expert, IRC Water Supply and Sanitation Centre; Barbara Jansen, Inspector, Ministry of Finance; and Yvonne Stassen, Acting Cluster Head for Policy Control, Financial and Economic Affairs Department, Ministry of Foreign Affairs.

We are very grateful to the staff of the Inclusive Green Growth Department and concerned embassies for their assistance in undertaking the country case studies and overall policy review, and for their comments on draft reports. And special thanks go to the many informants from target groups, concerned authorities in partner countries, community organisations, network and knowledge organisations, multilateral organisations, consultancy companies and other stakeholders and experts who generously provided information and insights in the course of the review.

On behalf of IOB and the evaluation team, I thank all concerned for making this policy review possible.

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List of abbreviations

ABN	Autorité du Bassin du Niger	
ACC	African Conservation Centre	
ADAPTS	Adaptive Water Management at the Local Scale	
ARA	Administração Regional de Aguas	
ASAL	Arid and Semi-Arid Lands	
ASAS	Sector Support to the Water Sector (Apoio Sectorial para Água e Saneamento)	
ADB	Asian Development Bank	
ASAP	Adaptation for Small Holder Agricultural Programme	
ATPS	African Technology Policy Studies Network	
AWM	water management across water management themes	
BDP	Bangladesh Delta Plan	
BNPP	Bank Netherlands Partnership Programme	
BWDB	Bangladesh Water Development Board	
CAP-NET	Capacity Building in Sustainable Water Management	
CCPT	cross-cutting policy themes	
CDSP	Char Development and Settlement Project	
CFA	Cooperative Framework Agreement	8
CIWA	Cooperation in International Waters in Africa	
CGIAR	Consortium of International Agricultural Research Centres (formerly:	
	Consultative Group on International Agricultural Research)	
DNH	Direction Nationale de l'Hydraulique	
DRR	disaster risk reduction	
DRRT	Dutch Risk Reduction Team	
DSS	decision support system	
DSS	disaster surge support	
DUPC	DGIS UNESCO-IHE Programmatic Cooperation	
DWA	Dutch Water Authority	
DGIS	Directorate General International Cooperation	
DWA	Dutch Water Authorities	
E4L	Ecosystems for Life	
EKN	Embassy of the Kingdom of the Netherlands	
EM	Explanatory Memorandum to the Ministry's Budget	
ENTRO	Eastern Nile Technical Regional Office	
EU	European Union	
FAO	Food and Agriculture Organization	
FEZ	Financial and Economic Affairs Department, MFA	
FGD	focus group discussion	
FMMP	Flood Management and Mitigation Programme	
GEF	Global Environment Facility	
GERDP	Grand Ethiopian Renaissance Dam Project	
GIRE	Gestion Intégrée des Ressources en Eau	
GIRENS	Gestion Intégrée des Ressources en Eau du Niger Supérieur	

GOB	Government of Bangladesh	
GOG	Government of Guinea	
GOM	Government of Mali	
GON	Government of the Netherlands	
GWAPB	Gender and Water Programme Bangladesh	
GWA	Gender and Water Alliance	
GWP	Global Water Partnership	
HGIS	Homogeneous Group (Budget) International Cooperation	
HYCOS	Hydrological Cycle Observing Systems	
ICRAF	World Agroforestry Centre (formerly: International Centre for Research in	
	Afroforestry)	
ICZM	integrated coastal zone management	
IDB	Inter-American Development Bank	
IFAD	International Fund for Agricultural Development	
IGG	Inclusive Green Growth Department, MFA	
IIIMP	Integrated Water Resource Management Project (Integrated Irrigation	
	Improvement and Management Project)	
INGO	internationally operating NGO	
IOB	Policy and Operations Evaluation Department, MFA	
IPSWAM	Integrated Planning for Sustainable Water Management	9
IUCN	International Union for Conservation of Nature	
IWA	International Water Ambition	
IWMI	International Water Management Institute	
IWRM	integrated water resource management	
KIFFWA	Kenya Innovative Finance Facility for Water	
KFW	German Development Bank (originally: Kreditanstalt für Wiederaufbau)	
LDCF	Least Developed Countries Fund	
M&E	monitoring and evaluation	
MASP	Multi-annual Strategic Plan	
MDB	multilateral development bank	
MECDR	Middle Eastern Centre for Desalination Research	
MIB	Multiannual Interdepartmental Policy Framework (meerjarig	
	interdepartementaal beleidsplan)	
MIS-OS	Management Information System Development Cooperation	
	(ontwikkelingssamenwerking)	
MEA	Ministry of Economic Affairs	
MFA	Ministry of Foreign Affairs	
MI&E	Ministry of Infrastructure and the Environment ¹	
MIS	management information system	
MF	Ministry of Finance	
MRC	Mekong River Commission	
MTE	mid-term evaluation	
MTR	mid-term review	

MWRI	Ministry of Water Resources and Irrigation
NAPA	National Programme of Action
NGO	non-governmental organisation
NICHE	Netherlands Initiative for Capacity Development in Higher Education
NL	Netherlands
NBI	Nile Basin Initiative
NBTF	Nile Basin Trust Fund
NCICD	National Capital Integrated Coastal Development
NCORE	Nile Cooperation for Results
NHS	National Hydrological Service
NWO	Netherlands Scientific Research Organisation (Nederlandse organisatie voor
	Wetenschappelijk Onderzoek)
NWP	Netherlands Water Partnership
NWRP	National Water Resources Plan
NWRP-CP	National Water Resources Management - Coordination Project
O&M	operation and maintenance
ODA	official development assistance
OdN	Office du Niger
OMVS	Organisation pour la Mise en Valeur du fleuve Sénégal
ORIO	Development-relevant infrastructure development (ontwikkelingsrelevante
	infrastructuurontwikkeling)
PADIN	Programme d'Aménagement du Delta Intérieur du Niger
PAHA	Plan d'Aménagement Hydro-Agricole
PASARC	Projet d'Appui à la Sécurité Alimentaire et la Résilience des Populations aux Crises
	Climatiques et Sociales dans la Région de Mopti
PCA-GIRE	Programme Conjoint d'Appui à la GIRE
PISP	Participatory Irrigation Sector Project
PPP	public-private partnership
PRIMA	Progressive Realisation of the Incomati-Maputo Agreement
PvW	Partners for Water (Partners voor Water)
QANS	Quick Assessment and Nationwide Screening
RBO	river basin organisation
RDB	regional development bank
RFMMC	Regional Flood Management and Mitigation Centre
RPE	Order on Periodic Evaluation and Policy Information (Regeling Periodiek
	Evaluatieonderzoek)
RVO	Netherlands Enterprise Agency (Rijksdienst voor Ondernemend Nederland)
SADC	Southern African Development Community
SBE	sub administrative unit (subbeheerseenheid)
SDGs	Sustainable Development Goals
Sida	Swedish International Development Cooperation Agency
SIWI	Stockholm International Water Institute
SMART	specific, measurable, attributable, realistic, time-bound
SWF	Sustainable Water Fund
SWFF	Securing Water for Food

(S)NWM	(sub) national water management
SWAIWRPMP	South West Area Integrated Water Resources Planning and Management
	Project
TF	trust fund
ТоС	theory of change
ToR	terms of reference
TWM	transboundary water management
UDW	Urbanising Deltas of the World
UN	United Nations
UNDP	United Nations Development Programme
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNESCO-IHE	UNESCO - International Institute for Hydraulic and Environmental
	Engineering ²
VU-IVM	Vrije Universiteit (free university) Amsterdam - Instituut voor
	Milieuwetenschappen (Institute for Environmental Studies)
WACLIMAD	Water Management for Climate Change Mitigation and Adaptive
	Development in the Lowlands
WB	World Bank
WFP	Water Financing Partnership
WIN	Water Integrity Network
WISMP	Water Resources and Irrigation Programme
WMAg	water management in agriculture
WM	water management
WMA	water management association
WMG	water management group
WPF	Water Partnership Fund
WPP	Water Partnership Program
WUA	water user association
WUG	water user group
WUR	Wageningen University & Research
WWF	World Wide Fund for Nature
YEP	Young Expert Programme

Summary, main findings and recommendations

Background

From 2006, after a period of primary policy concern with drinking water supply and sanitation, improved water management became an increasingly prominent priority of the development aid policy of the Dutch Ministry of Foreign Affairs (MFA). In 2011, water became one of the Dutch aid policy spearheads. There was a dual justification for this. First, severe and urgent water problems – of water scarcity in some parts and flooding in other parts of the world, linked to issues such as increasing conflict over catchment areas, exacerbated by population growth and climate change – affect the world's economy and sustainable development. Secondly, the Netherlands, as a world leader in water management, has an opportunity, as well as a duty, to be a driving force and provide a fundamental contribution to solving these problems.

In line with the international discourse on water management, the Dutch policy was guided by the principle of integrated water resource management (IWRM), defined as a process that promotes the coordinated development and management of water, land and related resources in order to maximise economic and social welfare in an equitable manner without compromising the sustainability of vital ecosystems. The policy evolved from a broad focus on national IWRM plans and transboundary water management (TWM) to a more specific focus on efficient use of water in agriculture and on improved watershed management and safe deltas, mostly in Africa and Asia. To optimise effectiveness, issues of climate change, environment, governance, gender equity and poverty reduction (as an overarching objective) were to be addressed. Growing emphasis was put on Dutch expertise and engaging the Dutch water sector in development cooperation for improved water management.

In 2013, the policy was further framed by a new agenda of the Ministry of Foreign Affairs to establish aid and trade relations to strengthen poverty reduction, market access and the business environment of the countries concerned as well as the Netherlands' economy and employment. For Dutch bilateral cooperation, a distinction was made between bilateral aid and transitional relationships. Aid was proposed in the case of partner countries that are unable to solve their poverty problems singlehandedly; transitional strategies from aid to trade were adopted for low- and middle-income countries with rapidly growing economies. By 2016, the number of partner countries for Dutch bilateral cooperation in water stood at eleven, of which five were categorised as aid countries (Yemen, Mali, Palestinian Territories, Rwanda and South Sudan) and six as countries for transitional relationships (Bangladesh, Benin, Ghana, Indonesia, Kenya and Mozambique).

The MFA and Dutch embassies worked on policy implementation through partnership with and co-funding of activities of multilateral organisations, governments of partner countries, NGOs and the private sector. The MFA aid policy was implemented in a context of partial overlap with policy and instruments of other parts of Dutch government. One area of overlap was the international component of the Dutch Water Policy of the Ministry of Infrastructure and Environment (MI&E). The MI&E aimed to contribute to solving world water problems, support climate change adaptation and promote the role of the Dutch water sector to enhance economic opportunities through the programme *Water Mondiaal*. Others were instruments, created by the MFA for different policy goals such as private sector development, with water as one of their themes. Instruments across the policy domains were partly administered by the Netherlands Enterprise Agency (RVO) of the Ministry of Economic Affairs. Interdepartmental mechanisms were created for enhancing water policy coherence, steering and coordination. In 2016, intended synergies between the MI&E, MFA and the Ministry of Economic Affairs (MEA) were articulated in an interdepartmental policy letter, titled *Converging Streams – International Water Ambition*. This policy aimed to address the water challenges faced in urban deltas and their supply systems, and the Dutch role in tackling them, focusing on seven countries including three partner countries for development cooperation.

This review focuses on the development aid policy of the MFA and covers the period 2006 to 2016. The total expenditures of the MFA for a total of 225 registered activities (funded programmes, projects and facilities) with a principal or significant focus on water management amounted to EUR 871 million. Of these activities, 162 (59% of expenditures) were funded from budgets delegated to Dutch embassies for the partner countries. The remaining 63 activities (41% of expenditures) – almost all global, regional or multi-country activities – were funded from the Ministry's central budget.

The review provides insights in policy effectiveness and efficiency and recommendations for future policy. Evaluation questions on effectiveness were derived from reconstructed intervention logic for the thematic areas water management in agriculture, (sub) national water management and transboundary water management. The review also addresses questions on the integration of issues of climate change, environment, governance, gender and women's participation, poverty reduction and on the involvement of the Dutch water sector. On policy efficiency, the questions addressed were confined to organisational and operational aspects affecting achievement of results. Cost efficiency could not be assessed for lack of data. The main information sources for the review were: (1) a series of IOB country case studies (Bangladesh, Indonesia, Mali and Mozambique) and studies of activities, including site visits and focus group discussions with beneficiaries; (2) available mid-term and final evaluation reports on activities; and (3) interviews with a wide range of stakeholders in the Netherlands and in partner countries.

Main findings

 The Netherlands development aid policy for improved water management was largely successful in achieving its intended various results in water management. But the policy faced challenges in ensuring appropriate institutional development and sustaining improvements at the relevant local, (sub) national and transboundary levels.

Dutch support to **water management in agriculture** achieved many useful results from the narrow perspective of irrigation efficiency. MFA support did improve the quality, quantity and timing of water supplies to farmers in many cases, enhancing the efficiency of agricultural water use in some cases. (It did not always adequately address the potential

negative environmental effects.) In many countries, MFA support did enhance the enabling environment for water user representation and participation in water management for agriculture at local levels (such as polders and (sub) districts). Farmers, including female farmers, were empowered with better knowledge, skills and representation through these initiatives. MFA support generally promoted the concept of user payments for agricultural water management and/or supply, but had limited success in this regard, affecting sustainability of service provision.

Full policy effectiveness in this subsector depends on many other factors and interventions. In some cases, better agricultural water management may be best achieved through better soil management, and it is more feasible to achieve sustainable production increases through enhancements to rainfed practice, rather than the often costly import of water from elsewhere to the farmer's field. Even when the latter is the appropriate strategy, the 11 years of experience reviewed here show that sustained benefits depend on appropriate institutional capacity at all levels – to which many Dutch projects contributed in the short term without always being able to achieve assured strong performance in the longer term. Institutional maintenance is at least as important as technical maintenance of agricultural water management infrastructure – because technical maintenance is managed and executed by institutions that must remain strong and competent for the purpose. Beyond the narrow perspective of irrigation efficiency, the effectiveness of Dutch support to water management in agriculture was less assured.

Further factors constraining progress in support for water management in agriculture concerned governance, social stratification and gender. At various levels in some partner countries, from communities to capitals, challenges of corruption were only partly overcome and it proved impossible to achieve the massive transformation of key national institutions that was needed to enhance agricultural water management sustainably. Linked to these governance problems were the entrenched interests of better-off users of agricultural water. There was mixed success in persuading elites to cooperate with local water management institutions and improvements. Dutch policy achieved honest efforts to empower women in agricultural management, but mostly at the preliminary stage of increasing numbers rather than achieving genuine empowerment. This in itself, though, helped to shift social attitudes about women in society: a shift that may not easily be reversed.

(Sub) national water management planning is such a broad field that the performance of Dutch aid policy in support to it was understandably varied. The technocratic process of preparing water management plans at various scales was an attractive field for the deployment of Dutch expertise, and high quality outputs generally resulted. To be effective, however, such plans must be approved and executed. While approval was not often a major obstacle, there was less assurance about effective implementation. Larger-scale technical planning exercises, such as the Bangladesh Delta Plan 2100 and planning for Jakarta flood management, demonstrated that planning, approval and implementation are not three discrete, sequential steps. They are all overlapping aspects of what is likely to be an extended process of adaptive management. Planning and replanning are likely to continue

over many years as implementation unfolds, new challenges arise and new lessons are learned. None of this facilitates the assessment of effectiveness. Expectations of clear results must be moderated. But in many cases, Dutch assistance strengthened this complex process and led to clearer analysis of issues followed by better-structured action to enhance water management.

Dutch support to water management planning succeeded in mainstreaming the principles of IWRM at many levels. But it did not overcome the basic institutional challenges of aligning the planning and management of this natural resource with the administrative structures of local government. Efforts to develop catchment management procedures and institutions were pursued in several countries, and made good technical sense. But partner governments rarely showed the political will to resource these new structures adequately or to give them the authority they would need to interact effectively with established local government systems.

This weakness linked to a broader challenge for assistance to water management planning and the effective implementation of water management plans. The effectiveness of these efforts depended ultimately on domestic institutional factors that external agencies can only influence to a limited extent. Many years of institutional development and planning support to major national water management institutions in some partner countries had only modest effect. There was no easy way out of this dilemma, which was a fundamental constraint on the largely technically competent and politically well-intentioned efforts of Dutch development assistance. There was some potential, in some cases, for alternatives – although public-private partnerships proved not to be the strong solution that some had hoped for. Another strategy, as pursued in Mozambique, was to step sideways from the public sector and support the development of parastatals that, with separate legal status, could retain staff with better terms of service and work more effectively outside (or partly outside) the constraints of state bureaucracy. But not all partner countries offered the legal and institutional space for such approaches.

In the field of **transboundary water management**, effectiveness is a long-term and largely political challenge. TWM's significance to riparian states typically varies with those states' positions along a shared watercourse. Netherlands support included assistance to TWM in three countries strongly influenced by the upstream management of rivers that significantly affected their own environmental and economic welfare. In most of the TWM work supported during the review period, effective delivery of technical outputs – such as shared monitoring and early warning systems – proved relatively straightforward, at least for the duration of the projects that delivered them. Building intergovernmental institutions with the resources, competence and political backing to control and allocate rivers' resources fairly and effectively was a much greater challenge. However important downstream states might find such action, their upstream neighbours were less likely to feel much urgency.

Even when joint action was, in principle, agreed, institutional development tended to be sluggish and resourcing inadequate. Where Dutch assistance was provided to existing TWM bodies, its effectiveness was often curbed by the lethargic bureaucracy of international diplomacy, in which expensive formalities sometimes seemed to have a higher priority than practical action. Interventions by the Netherlands or any other foreign donor were bound to be politically sensitive. It was simpler for such projects to work at the Track III level of diplomacy – cooperation between civil society structures in different countries – than at the Track I level of formal, intergovernmental diplomacy. At both levels, Dutch-supported interventions did not always get the sensitivities right.

The centrally funded global, regional and multi-country (co-)funded activities that provided development assistance **across water management themes** contributed largely successfully to results such as: (1) IWRM awareness, policy influence, policy relevant research and capacity and knowledge across networks; (2) improvement of the quality of investment projects of multilateral development banks; and (3) enhanced involvement of the Dutch water sector and diverse achievements of limited scope. Such activities helped to build and maintain the Dutch water sector's international reputation and the Netherlands' relations with other countries in water management. However, it proved challenging to demonstrate the success of the often small activities, with their modest results, at higher levels of intended outcomes such as sustained capacity building.

The assistance through network and knowledge organisations such as the Global Water Partnership, the IHE Delft Institute for Water Education and through the UNDP capacity building for sustainable water management project, contributed mostly successfully to results such as (I)WRM awareness, IWRM-based policies, policy relevant research, enhanced capacity and knowledge across networks; but demonstrating success in sustained capacity building was difficult. Co-funded partnership programmes of multilateral development banks were successful in facilitating an increase in the quality of investments in water management projects through expertise and innovation; but partnership programme result chains, including impacts on investment projects' beneficiaries and poverty reduction, were found to be unrealistic. The RVO-administered Water OS programme was successful in building MFA capacity to engage the Dutch sector in bilateral cooperation, in intensifying collaboration and in diverse achievements of limited scope. But the opportunities, appetite for and (likely) success of activities engaging the Dutch water sector varied significantly, depending on the conditions in specific countries.

2) Dutch policy made varying progress with integrating issues of climate change, environmental sustainability, good governance, gender and poverty, partly explained by the design or delivery of projects and partly by domestic political, institutional and/or social factors.

Dutch assistance facilitated engagement with **climate change** issues through support to specific climate change awareness-raising, planning and piloting activities, through Netherlands embassies' Multi-annual Strategic Plans (MASPs), and through design of projects. In about half of the water management planning activities, climate change adaptation/mitigation became part of projects' objectives. Dutch assistance generally facilitated the further mainstreaming of these concerns through support for partner

countries' water management planning and strategies. But achieving practical action on it proved challenging. Overall, even if climate change is not explicitly addressed, improvements in water productivity and protection from flooding may be expected to contribute to climate change adaptation, if these improvements occur in regions where climate change is of primary concern. There was noticeable variation in the urgency with which partner countries perceived the threat of climate change. In Mali, the issue was at the forefront of policy and programming concern. In Indonesia, other water management challenges were seen as more immediate.

The same must be said about the cross-cutting theme of **environmental sustainability**. This was central to the IWRM principles that Dutch support did help partner countries to mainstream meaningfully into national and local approaches. While environmentally sensitive approaches were always promoted and there was increased attention to environmental impact assessment in water management planning, the basic principles were not always respected. Environmental sustainability concerns were overridden in Mali. In Indonesia, the focus on Jakarta's urban flooding problems did not effectively include the environmentally appropriate planning and management approach to the whole catchment of the city's 13 rivers. Indeed, there was a basic environmental risk in the recent Dutch policy emphasis on urban deltas. There may be too tight a focus on water management in cities (which often offers interesting commercial opportunities) without sufficient attention to the broader (rural) environment in which they are located. This can significantly impair the effectiveness of assistance to urban deltas.

In Dutch support to water management, attempts to improve standards of **governance** were naturally intertwined with efforts to build institutions at national, intermediate and local levels. Efforts were successful in raising awareness, enhancing knowledge and promoting action for improved governance. Improving governance standards is always a complex and sensitive challenge even in one's own country, let alone other countries. A few interventions, notably the multi-country support to the Water Integrity Network, focused directly on this theme. They had little success because of the political sensitivity of the issue. Secondly, efforts were made to enhance governance in the framework of broader programmes of planning and implementation. Some progress was made in this regard, but nations' willingness and ability to improve standards of governance were inextricably linked to their willingness and ability to make major institutional reforms. In some cases, the political will to do this was clearly lacking. In others, it was more evident, but the progress was slow. At the end of the review period, corruption was still a serious impediment to effective water management in some countries; the commitment to transparency, representative participation and due process remained inadequate.

The third approach to enhanced governance in water management was the involvement of Dutch water authorities. This was partly an offer of these authorities' technical expertise (whose applicability to foreign conditions could not be taken for granted). It was also an offer of the principles of user representation and user payments that are central to Dutch water governance. The first of these was easier for other countries to accept than the latter.

Both posed significant and time-consuming challenges of institutional development. Dutch governance approaches were not automatically transferable.

Gender did not receive high priority in most of the Dutch funded water management activities assessed by this review. It received the usual acknowledgement as a cross-cutting issue, and – as in so many sectors – there was due attention to counting female participants and stimulating women's membership of (especially local) water management institutions. While projects were ongoing, there were some real social and other livelihood benefits for women water users. But the all too common pattern persisted. Women might even outnumber men in water management structures. But men would continue to do most of the talking and wield most of the power. The genuine empowerment of women is a much deeper process of social change than a water management project can accomplish. Nevertheless, this review found hope that the incremental improvements such projects made in some field settings were useful contributions to that process. Furthermore, even if project-supported institutions are not maintained the gradual empowerment of women may not be reversed.

The overarching policy objective of genuine and lasting **poverty reduction** is equally difficult to achieve. It, too, is a profound social and political challenge for any nation. Like gender, poverty reduction was frequently identified as a target of water management activities supported by the Netherlands. A major part of the water management project portfolio was designed for and implemented in poor and vulnerable areas, or included such areas. Most project designs did not include a specific pro-poor focus or inclusive development focus. In the review of case studies, there is limited evidence of lasting results. This was partly because of technical, economic and institutional weaknesses in project design or delivery. It was also due, in some cases, to the difficulty of shifting the entrenched privileges of rural elites, who managed to maintain strong influence over water management and/or related productive resources. While some water management activities that the Netherlands supported undoubtedly did benefit large numbers of very poor people – such as the Char Development and Settlement Project in Bangladesh – poverty reduction was not a major achievement of these 11 years of Dutch aid policy for water management.

The recent focus on urban deltas offered new opportunities, but called for new caution, with regard to poverty. In developing countries, urban deltas are typically home to huge numbers of very poor people. Improving water management there can materially improve their quality of life, if not their actual incomes. The same urban deltas also accommodate massive wealth: the skyscraper office blocks and luxury apartments of the elite – who may benefit disproportionately from better water management as land and property values rise. At the end of the review period, Dutch policy was still grappling with these tensions.

3) The Dutch government and knowledge organisations built and maintained a largely good reputation as development partners in water management. The expected involvement of the Dutch water sector was overestimated, however, and the modest scale of activities did not necessarily match the high Dutch policy intentions.

Following the 11 years of aid policy implementation assessed, the review concludes that the Dutch Ministries of Foreign Affairs and Infrastructure and Environment, and knowledge organisations, were largely respected among governments and other stakeholders in developing countries as active, knowledgeable and reliable development partners in water management.

As aid policy became partly absorbed into a broader Dutch interdepartmental approach, the profile and ambition of the Dutch government's public statements of intent grew higher, as exemplified by references to safe deltas, inclusive development and the Dutch sector being a driving force for solving water management problems. These intentions were not necessarily matched by the still modest scale of activities involving the sector funded from development and other budgets to achieve them.

The Dutch water sector became more involved, while aid and trade were juxtaposed increasingly often in Dutch policy and discussion about it - in various combinations. Some focused on the combination of aid and trade; some on a supposed shift from aid to trade; others on the notion that aid served as a foundation for trade. These were all simplistic interpretations of Dutch intent, which – according to some informants – aimed to stimulate trade by all parties. But they variously reflected a definite policy commitment to expand commercial opportunities for the Dutch private sector wherever feasible and appropriate in water management cooperation activities. Embassies' multiannual plans duly reflected this. In practice and in aggregate, the expected involvement of Dutch firms in shaping, funding and helping to execute Dutch policy turned out to be overestimated. Partly this was because water management is mainly a public sector responsibility. Partly it was also because of the limited commercial opportunities, and consequently commercial appetite, in some partner countries - often linked to the comparatively high costs of Dutch expertise. And partly it was because policy instruments were not fully efficient in achieving this sort of development contribution. In general Dutch firms, benefiting from the knowledge and experience gained in the context of development cooperation, took part as consulting service providers.

4) Policy efficiency was partial. There was good progress in collaboration with the relevant actors, complementarity and synergy of activities, and largely continued technical competence. Policy efficiency was constrained by unrealistic design of activities, various coordination challenges, fragmentation of part of the development effort, cases of approaches not suiting local conditions, and weaknesses in performance assessment.

The MFA made good progress in enhancing **collaboration between the actors concerned** within the Dutch government and the Netherlands water sector, with multilateral and other internationally active actors in water, and in bilateral cooperation partner countries. It also strengthened the complementarity and synergy of activities.

Many of the valuable contributions by the Dutch water sector (including and in combinations of water experts of the MFA, the Ministry of Infrastructure and Environment and the Netherlands Water Partnership) showed largely ongoing **technical competence**, knowledge about partner countries, relevant networks and the overall strength of the Dutch sector. The findings also show increased collaboration between Dutch water sector actors, joint initiatives and examples of cross-fertilisation between activities, contributing to good bilateral and multilateral relations and development cooperation results.

However, across the water management themes identified by this review, **design of activities** was often found to be unrealistic and optimistic about rates and costs of implementation. Two factors were at work here. The first was unrealistic design, which in some cases was unduly optimistic about the speed and cost with which intended results could be accomplished. The second was an insufficiently critical approach to the weaknesses of past implementation, meaning that new inefficiencies compounded old ones as additional funding was invested in the rehabilitation of infrastructure and institutions that earlier projects, or previous phases of the same project, had introduced. This was the 'build, neglect, repair' problem to which this report makes repeated reference.

The number of Dutch actors directly involved grew significantly during the review period, magnifying the **challenges of coordination**, affecting partner countries as well. For the interdepartmental bilateral cooperation focusing on delta countries, the review found Dutch government and other Dutch experts combining technical, management and diplomatic skills and able to steer engagement successfully despite complex institutional and political environments. The 'delta teams' and smaller management teams developed for this purpose had some success in strengthening engagement by Dutch ministries and other stakeholders, and in seeking synergies by combining the numerous instruments and funding mechanisms available for water management policy. Within and beyond these expert groupings, however, the consensus was that the amalgam of strategies and instruments in place at the end of the review period was inefficient. For Dutch stakeholders and foreign partners, it was often confusing, hard to access, fragmented, hard to coordinate, poorly monitored and inadequately reported.

Part of the burden in The Hague and at embassies was to ensure adequate **coordination with other donors**. Partly that coordination involved the alignment of strategies, and sometimes of advocacy to partner governments. Another mode of coordination was joint funding. As in most sectors of development cooperation effort, the first mode of cooperation was sometimes inadequate, although increasing convergence around the principles of IWRM, and latterly the SDGs, reduced the potential for contradictions. The Netherlands often engaged in joint funding with multilateral development banks – notably the World Bank and the Asian Development Bank – providing valuable financial leverage with a relatively modest capital contribution and often gaining significant technical influence over programme design and implementation – for example, by funding design and supervision consultants. While interministerial and multi-stakeholder **coordination structures and mechanisms** were put in place and did function, a hybrid set of roles and responsibilities emerged that lacked the clarity of earlier years. Despite the proliferation of stakeholders, roles and budgets, embassies were still seen at the end of the review period – particularly by and in the partner countries – as the central agencies for coordination of the entire water management interface between the Netherlands and those partners. Limited available staff made it impossible both at embassy and at central level to fulfil coordination, supervision and monitoring roles adequately. While numerous inefficiencies can be identified in the management and implementation of the portfolio, there were limits to what a water expert at an Embassy or the policy department could do.

For some of the **global**, **regional and multi-country activities**, the available evaluation reports give evidence for one or more of the following concerns: (1) fragmentation over many countries and unrealistically high ambitions for often small activities with modest results, making it particularly difficult to demonstrate (likely) success at higher levels of intended outcomes; (2) limited funding for and involvement of local stakeholders undermining engagement and ownership; and (3) in some countries, challenges in the process of linking MFA-funded activities with instruments administered by RVO and other Dutch agencies, leading to fragmentation of the development effort and a weakening of reporting and performance assessment.

Technical quality also affected the efficiency with which the portfolio of activities was carried out. Paradigms, approaches and techniques for water management that the Netherlands promoted and supported were largely appropriate – and hence feasible, practical and affordable in local conditions. This was shown, for example, in rural water management activities in Bangladesh and Indonesia, as well as flood management and drainage work in Indonesian urban areas. The application of Dutch irrigation, drainage and planning expertise continued to demonstrate the enhanced water management efficiency that Netherlands support could help to accomplish. Longer-term efficiency, however, was largely dependent on success in transferring this expertise to local agencies and personnel. The costs of achieving high technical quality through the use of Dutch expertise were understandably high. As Netherlands policy focused increasingly on commercial opportunities for the Dutch water sector, this was an important concern – although Dutch operators did successfully build a commercial clientele in sectors like Indonesian peat/lowland management and land reclamation, as well as dredging in Bangladesh.

Efficiency was constrained in some cases, however, by insufficient knowledge about how the recommended technical approaches would work in local environmental, social and institutional conditions. Some projects were more or less explicitly intended to explore new technologies – such as the urban dredging exercise in Dhaka, Bangladesh, and the Building with Nature project on the north Java coast in Indonesia. Others were seen by local stakeholders as making technical errors or being unable to overcome local social or institutional obstacles – as in some polder drainage work in southern Bangladesh. In many cases, as this policy review repeatedly emphasises, technical quality and efficiency were undermined by institutional factors that affected the sustainability of achievements.

There were also risks associated with the increasing use of partnerships between Dutch water authorities and partner country water management agencies. While many of the technical and institutional approaches promoted by the water authorities were useful and their contributions were generally appreciated, instances did arise when efficiency was reduced by the introduction of technical or institutional measures that were inappropriate for local conditions. The strong reputation of the Dutch water authorities was, of course, not a sufficient condition for them to make a useful contribution in other countries.

The methodology applied for **policy results reporting** improved. But the identified results indicators did not always provide a good measure of funded interventions' performance, let alone explanation of what worked and did not work and why. A concern to satisfy accountability requirements through simplified aggregate indicators came to predominate over reporting that might support learning more strongly. Most evaluations of activities produced did not serve assessment of policy performance. RVO results reporting on the Sustainable Water Fund was reported to show limitations in the provision of information that helped the policy department to account for policy results and draw lessons at higher policy level. Monitoring and evaluation of centrally funded support provided to partner countries was limited; the embassies' responsibility did not extend to these activities. All in all, there was not much information generated that could be used to improve policy performance.

Recommendations

Principles

The MFA should adopt the following principles in the design and implementation of its policy for improved water resource management.

An element of government funding is appropriate in the Netherlands' engagement with partner countries to improve water management. It is vital to sustain the soft power of the Dutch government and knowledge organisations as respected development partners in water management, thus contributing to knowledge building by the organisations concerned and to bilateral relations. It is vital also as an expression of the Netherlands' good global citizenship: its ongoing commitment to constructive social and environmental engagement with other nations.

Policy and its instruments should be kept as simple as possible. This does not necessarily mean restricting their scope. There are many sub sectors of water management in which Dutch engagement will remain mutually beneficial if guided by an integrated vision on water resource management and poverty reduction spanning the relevant local, national and transboundary levels. As aid policy is integrated with other elements of Dutch policy for engagements with developing and transitional countries, the combined effort will be more effective if it is framed, presented, managed, delivered, monitored and reported in a more integrated manner.

Coordination of policy and its implementation is therefore vital. This means coordination of centrally funded activities and those funded through embassies' delegated budgets, as well as coordination between the funds, instruments and activities of the various MFA directorates and of other ministries and agencies in The Hague. At country level, the Netherlands Embassy should have the resources to play the required central role in this coordination.

Dutch policy for supporting improved water management should be realistic about what external engagements can achieve, over what period. Realism is needed not only in terms of technical implementation rates, but also the extent to which national institutions are amenable to externally induced change.

Policy effectiveness

Adaptability of policy to very different circumstances

Modes and formats of support to water management at (sub) national and transboundary levels should be differentiated more clearly in accordance with the conditions and the relationships that have been built.

The policy under review spans countries where various key factors were still extremely negative and indeed aid may even have been a secondary consideration compared with political and military survival (Mali), as well as countries where fiscal resources and institutional capacity were vastly greater (Indonesia). With the increasing focus on so-called delta countries, the question is whether the policy will be flexible enough to contribute in a meaningful way to solutions for priority issues in varying circumstances. In specific local conditions, like Jakarta and Beira, entrepreneurial management can exploit the current suite of instruments and facilities efficiently and effectively, building the sort of Dutch profile and performance to which recent policy statements like the IWA aspire. In most conditions, and almost all the poorer partner countries – plus at least one transition country, Bangladesh – most of this is irrelevant and impractical.

Realistic balance in intervention levels and in framing of results

Dutch policy should strike a realistic and appropriate balance between local level, practical water management interventions – where meaningful results can probably be achieved in the short to medium term – and higher-level interventions in support of institutional reform and development, where progress is likely to take longer and be less tangible, and might even fail to materialise. While practical local interventions depend for full effectiveness on supportive national institutional frameworks, it is important to be making more tangible, shorter-term progress benefitting poor men and women at local level while attempts at institutional development continue. For transboundary water management, depending on the circumstances, a realistic balance should be struck between technical interventions across countries, as needed, and capacity and institutional development focusing on those countries that have much at stake and, compared to other countries, have

a weaker bargaining position. Projects should include provisions to ensure that maintenance of physical infrastructure that they build or renovate is at least ensured for a reasonable period of time, for example ten years. The above implies striving for the most appropriate mix of technical, social and institutional expertise.

Realism should also guide the formulation of MASPs and framing of (measurable) policy results, congruent with the portfolio of activities and taking into account constraining factors in specific contexts. Reporting on a limited number of aggregated indicators is bound to be generic, not clearly reflecting positive or negative results for target populations.

Enhancing the contribution of the centrally funded part of policy to actual problem solving

Dutch-funded global, regional or multi-country activities across water management themes made a recognised contribution to policy influencing, knowledge and capacity building, networking and the Dutch water sector reputation and international relations. But the findings show particular concerns about these activities' contribution to sustained capacity building and problem solving in developing countries. Centrally-funded global, regional and multi-country programmes and facilities that fund projects spread over multiple countries should ensure that these projects are well grounded in the local context; and that sufficient funding is available for optimal participation and ownership of the authorities and other local partners in each of the countries concerned. Such projects should preferably be structured within broader, context-specific programmes (e.g. in bilateral, UN or multilateral development bank regional or country programmes). Dutch embassies should play an important role in advising the policy department on the funding of these activities.

Aid and trade relations – a more nuanced approach within global commitment

Whether aid for water management and trade can be synergistic depends on the specific country and area conditions and the relationships built. A more nuanced approach is needed, recognising that the aid and trade balance should vary with the country and the activities within a country. MASPs in recent years were too obedient in stating objectives around a largely or even fully trade-based relationship in the water sector just a few years from now. This was unrealistic; and apparent enthusiasm for commercial opportunities risks undermining the Netherlands' valued status in many partner countries as a 'trusted adviser' in the water management sector. The importance of exploratory, pilot type activities involving Dutch water sector actors remains undisputed, but it must be recognised that many will prove not to have larger-scale potential.

While the Netherlands government and embassies should remain alert and proactive about opportunities for the Dutch private sector, the overall water management engagement should be framed in terms of its commitment to the Sustainable Development Goals and to good global (environmental and social) citizenship, rather than trade objectives. The latter should be carefully assessed, and strategies accordingly adjusted, country by country.

Policy efficiency

Country-level planning

MFA country-level planning (MASPs), or any plan that replaces them, should: (1) offer a coordinated picture of, and plan for, MFA's centrally funded and delegated packages of work; (2) present everything the GON is going to do with/in/for the country – thus, in the water management sector, referring to how all the non-MFA/non-ODA facilities and instruments will be deployed as well as the usual MFA programmes and projects (to the extent that these continue). This partly happens in the case of Dutch government interdepartmental plans such as for Indonesia, covering the MFA delegated portfolio and relevant centrally-funded, RVO-administered MFA and non-MFA facilities and components.

Coordinating management and reporting

Routine coordinated reporting should cover the whole water management package at the country level of intervention, based on coordinated management of this whole package. Embassies are generally quite well coordinated with MFA headquarters in terms of doing what the policies say they should do. But coordinated management and reporting of activities that are centrally funded, of activities with delegated MFA funding and of activities that are the responsibility of other ministries, should be improved.

Lessening the coordination burden

The MFA, in consultation with the other Ministries concerned, may undertake a review of coordination tasks and identify feasible measures to lessen the current burden on embassies and central staff, and to strengthen decision making on issues that may hinder performance. The review should address both intra- and inter-ministerial issues of coordination between policies that include water (including clarity on policies' hierarchy) and between strategies and instruments. It should seek ways to lessen the reported burden of the increasing number of partner contacts, and ways to integrate performance reporting on water. The review should further advise on the human resource capacity at embassies and central level, including expertise on key cross-cutting issues, that is required to adequately take up the assigned tasks.

Improving policy performance monitoring, evaluation and reporting

A more systematic and coordinated approach to policy performance monitoring, evaluation and reporting should be developed, spanning the activity, (sub) national and transboundary strategy and thematic policy levels. Monitoring and evaluation of activities and strategies, with due attention to issues of climate change, institutional change, poverty and gender and to gender-specific reporting, should provide building blocks for performance analysis at higher aggregate levels. To this end, guidelines may be developed covering the distinguished levels. These guidelines should, to some extent, be flexibly applied to give discretion to staff of embassies and departments to decide in line with their specific responsibilities what information is needed for what purposes. At the same time, part of the monitoring and evaluation effort should be guided by prescribed questions on the performance criteria of effectiveness and efficiency that are specific to the policy area. The guidelines should provide for meaningful harmonisation with internationally agreed targets and indicators, such as those developed for the Sustainable Development Goals.



Policy review

1.1 Introduction

The Policy and Operations Evaluation Department (IOB) of the Dutch Ministry of Foreign Affairs (MFA) has undertaken a policy review of the Ministry's development aid policy for improved water management. Water management is the activity of planning, developing, distributing and managing the optimum use of water resources. Water is an essential resource for human well-being, for socio-economic development and the environment. The world faces increasing problems of water shortages, flooding and water pollution, exacerbated by population growth and climate change. If not managed properly, these problems will affect billions of people and the environment.

The purpose of this policy review is to contribute to:

- a. the Ministry's accounting for its policy effectiveness and efficiency;
- b. decision making about future policy.

This policy review is in accordance with the government-wide Order on Periodic Evaluation and Policy Information (RPE).³ The Order obliges Ministers to have their policies periodically evaluated, to inform the Dutch parliament on policy effectiveness and efficiency.

Central themes for the policy review are:

- a. the rationale for and description of the policy and of policy implementation;
- b. insight into policy effectiveness and efficiency;
- c. measures to improve effectiveness and efficiency;
- d. measures in case significantly fewer or more resources are available.

This policy review covers the period 2006-2016, during which the Dutch official development assistance (ODA) expenditures for projects and programmes with a significant improved water management focus or component amounted to EUR 871 million.⁴ This policy review complements the IOB policy review of the development aid policy for drinking water supply and sanitation (IOB, 2012).

Annex 3 offers a brief list of definitions of terms frequently used in this report.

³ The Dutch Ministry of Finance (MF) is the responsible Ministry for the RPE.

⁴ The Development Assistance Committee of the Organisation for Economic Cooperation and Development defines ODA as 'those flows to countries and territories on the DAC List of ODA Recipients and to multilateral institutions which are: (i) provided by official agencies, including state and local governments, or by their executive agencies; and (ii) each transaction ... which: (a) is administered with the promotion of the economic development and welfare of developing countries as its main objective; and (b) is concessional in character and conveys a grant element of at least 25 per cent (calculated at a rate of discount of 10 per cent)' (OECD DAC, 2017). See also footnote 11 below.

1.2 Policy background and rationale

The Netherlands has provided development aid for improved water management since the 1960s. In line with the international discourse on water, the main thrust of the policy shifted over time from a predominantly technical and construction-oriented development perspective towards an integrated one focusing on technical, social, economic, environmental, governance and institutional development aspects.

The UN conference on Environment and Development in 1992, World Water Fora held every two to three years since 1997, the UN conference on Sustainable Development in 2003 and the adoption of the Sustainable Development Goals (SDGs) at the UN Sustainable Development Summit in 2015 all contributed to a common perception and understanding of water problems and the way these should be addressed.

A key concept introduced at an international conference on Water and the Environment in Dublin, preceding the UN conference on Environment and Development in 1992, was Integrated Water Resource Management (IWRM).⁵ The Global Water Partnership, an independent intergovernmental organisation established in 1996 to promote IWRM, defines IWRM as 'a process that promotes the coordinated development and management of water, land and related resources in order to maximise economic and social welfare in an equitable manner without compromising the sustainability of vital ecosystems' (IEG, 2010, p. xiv).

The Sustainable Development Goals, adopted by the UN General Assembly in 2015, include sustainable water management as a key element of goal 6 on water and sanitation, aiming at water use efficiency across sectors, ensuring sustainable supply and withdrawals of fresh water, reduction of the number of people suffering from water scarcity, integrated water resource management at all levels and protection of water related ecosystems. Sub goal 6.5 states 'in 2030, implement IWRM at all levels, including through transboundary cooperation, as appropriate' (SDGs 2015, p. 18).

As from 2006, after a short period of a primary policy focus on drinking water supply and sanitation, improved water management became a progressively stronger priority of the Dutch development aid policy for water. The Ministry's policy letter Water for Development of 2012 provided the following arguments for the policy.

⁵ The Dublin Statement underlines four IWRM guiding principles: fresh water is a finite and vulnerable resource, essential to sustain life, development and the environment; water development and management should be based on a participatory approach, involving users, planners and policy makers at all levels; women play a central role in the provision, management and safeguarding of water; water has an economic value in all its uses and should be recognised as an economic good. The IWRM principles were adopted at the World Summit on Environment held in Rio de Janeiro that same year.

- 'Why water can't wait. Large parts of the world are facing water scarcity; others are experiencing 1. problems caused by too much water. Vulnerable regions in Africa and Asia suffer from drought while elsewhere flooding claims lives and causes economic disruption. There are other problems too, which, though less newsworthy, are equally far-reaching for the future of the global economy: escalating disputes over catchment areas, demand for water from vast, rapidly expanding urban agglomerations, progressive contamination of surface and groundwater, groundwater depletion in key food-producing regions, and the unbalanced and often uncontrolled economic development of the few remaining water-rich regions in Africa and Central Asia. Destabilisation of catchment areas by logging, progressive encroachment by monocultures and the disappearance of wetlands are all disrupting the natural water cycle and leading to environmental degradation. The estimated growth of the world population to 9 billion by 2050 coupled with changing consumption patterns in emerging markets will lead to an exponential rise in demand for water. Not only does this mean that by 2025 nearly two-thirds of the world's population will be living in areas with water scarcity, it also increases the risk of trade-offs between economic sectors, population groups and entire countries. Climate change leading to unpredictable and irregular rainfall is bringing these problems into sharp focus.
- 2. The Netherlands' strengths. The Netherlands' reputation and pre-eminent position as a nation with expertise in water management present it with opportunities for tackling the global challenges described above. We can become a driving force for improved global water management and secure access to clean drinking water and basis sanitation. We can also match our knowledge and experience of water management with the growing demand for broad practical support to help meet these challenges.' (MFA, 2012, pp. 2-3).

In 2013, a new Dutch agenda for aid, trade and investment provided a further argument, namely that engagement of the Dutch sector in development cooperation, including in the water sector, could contribute to the success of Dutch companies abroad (MFA, 2013, p. 5).

1.3 Dutch aid policy for improved water management, 2006-2016

The relevant aid policy documents over the eleven-year review period show an evolving thematic focus from IWRM to specified water management themes and objectives; a more pronounced geographic focus; and increasing attention to engaging the Dutch water sector and expanding its opportunities abroad.

During the first years of the review period, annual Explanatory Memoranda to the MFA budget show that the thematic focus was broadly on (sub) national IWRM planning and implementation and on transboundary water management (TWM) for enhanced regional cooperation and cooperative water management, targeting a range of countries and geographic water basin and catchment areas, mostly in Africa and Asia (MFA, 2006-2013).

The 2011 MFA Focus letter Development Cooperation to the parliament stipulated water as one of the four spearheads for development aid policy, along with safety and legal order, food security, and sexual and reproductive health and rights. The water management objectives

became: (1) to contribute to effective water management aiming at efficient and sustainable water use, particularly in agriculture; and (2) improved watershed management and safe deltas (MFA, 2011, p. 8).⁶ The letter stressed the specific knowledge of the Netherlands in water and the importance of sharing of this knowledge worldwide. Its integrated approach, in particular, was stated to be unique. The letter mentioned that there was demand for this knowledge in respect to watershed and coastal area management, sustainable irrigation and drainage and wastewater treatment. In addition, the Netherlands was seen as a source of expertise on climate change adaptation, protection of urban areas against flooding, development of innovative ways of financing, and involvement of users in planning and implementation. The Netherlands was further stated to have financial means (e.g. for involving Dutch companies) and to have achieved strong cooperation between its Ministries. The letter referred to the interdepartmental programme Water Mondiaal (see 2.1) as a good example of such cooperation, and mentioned the opportunities the water spearhead offered for Dutch businesses (MFA, 2011, p. 8). It announced a reduction of the number of countries for Dutch bilateral development assistance from 33 to 15, distinguishing between three country profiles: (1) low income countries where aid continued to play an important role; (2) fragile states pursuing an integrated approach to peace, security and development; and (3) countries with healthy economic growth where the aim was a transition to economic cooperation.

The MFA policy letter Water for Development of 2012 provided the most elaborate policy statement. It set out thematic priority areas and targets for the period to 2015: (1) efficient water consumption, particularly in the agricultural sector: improve water productivity and the ratio of water consumption to agricultural yields by at least 25% in Dutch-funded programmes; (2) improved watershed management and safe deltas: support the development of plans for sustainable growth and water security in at least eight catchment areas and deltas in Bangladesh, Benin, Ghana, Indonesia, Kenya, Mali, Mozambique and Vietnam, and start the roll-out of these plans; and (3) contribute to cross-border mediation and joint catchment area management in at least seven cross-border catchment areas, groundwater systems and deltas (Brahmaputra, Incomati, Nile, Mekong, Senegal, West Bank Aquifer and Zambezi) (MFA, 2012, pp. 7-9). Synergy between efforts for the spearheads water and food security was to be enhanced, and within the water programme special attention was to be paid to integration of four cross-cutting themes – environment, climate, gender and good governance (MFA, 2012, p. 6). Sustaining ecosystems for river and delta management and of promotion of production value chains and adaptation to climate change were to receive special attention. For good governance, efforts were to focus on improving laws and regulations, preventing corruption and contributing to equal access and decision-making power over water (MFA, 2012, p. 7). The governance focus included compliance with agreements between different water users on payment for water (MFA,

⁶ The Dutch development cooperation policy for water had three objectives, of which this policy review only covers two. The third objective concerned drinking water supply and sanitation. This was evaluated earlier (IOB, 2012). 2012, p. 11). Sustainability⁷ and transparency were to be taken up as principles in design and implementation of programmes (MFA, 2012, p. 5).

The 2012 policy letter further elaborated on joint ambitions in the framework of Dutch foreign policy. Whereas for development cooperation structural poverty reduction and sustainable economic growth were high level objectives, for Dutch foreign policy improving the economic position of the Netherlands was central, including in the top economic sector of water.⁸ The water programme was described as integrating these objectives in particular by engaging the Dutch water sector in shaping and implementing policy; and by collaborating with the Ministry of Infrastructure and Environment (MI&E) and the Ministry of Economic Affairs (MEA) to improve water management, thus profiling the Dutch water sector. This was to be done in five 'delta countries' (Bangladesh, Egypt, Indonesia, Mozambique and Vietnam) in the framework of the programme Water Mondiaal (MFA, 2012, p. 14). Three of these were partner countries for bilateral cooperation. In the remaining eight other partner countries (Palestinian Territories, Rwanda) programmes were to be formulated or stepped up (Benin, Ghana, Kenya, Mali, Rwanda, South Sudan) in the Water for Development Programme, in close consultation with the Dutch water sector as a whole (MFA, 2012, p. 14). Also programmes with multilateral partners were to be redesigned, with Dutch expertise involved in areas of added value (MFA, 2012, p. 16).

A further policy letter framing the Water for Development policy was the policy letter A world to gain: A new agenda for aid, trade and investment of 2013. The letter set out a policy to establish aid and trade relations to the benefit of poverty reduction, market access and the business environment of the countries concerned and to the Netherlands' economy and employment (MFA, 2013, p. 5). The agenda had the following broad set of characteristics relevant to the Water for Development policy: (1) long-term perspective, with a diminishing role for aid; (2) trade including transactions between (public and private) providers in developing countries and their clients delivering and paying for services and goods (like for irrigation services); between public and private providers; between neighbouring countries; and between developing countries and the Netherlands; and (3) a focus on investments as crucial for improving water management, in addition to capacity and institution building. Partner organisations were to be supported and stimulated to mobilise investors. For Dutch bilateral cooperation, the policy letter distinguished between aid and transitional relationships (MFA, 2013, p. 7). Aid was proposed in the case of partner countries that were unable to solve their poverty problems singlehandedly; transitional strategies from aid to trade would be adopted for low- and middle-income countries with burgeoning economies. By 2016, the number of partner countries for Dutch bilateral cooperation in water stood at eleven, of which five were categorised as aid countries (Yemen, Mali, Palestinian Territories, Rwanda, South Sudan) and six as countries for transitional relationships (Bangladesh, Benin, Ghana, Indonesia, Kenya and Mozambique).

⁷ The policy letter distinguishes financial, institutional, technical and social dimensions of sustainability (MFA, 2012, p. 5)

⁸ Dutch trade and industry policy prioritises the water sector as one of the top economic sectors (Ministry of Economic Affairs, Agriculture and Innovation, 2011).

The MFA aid policy was implemented in a context of increasingly complementary areas with other parts of Dutch government. An area of overlap was chapter 6 of the Dutch National Water Plan 2009-2015 of the MI&E⁹, which addressed the plan's international component. The chapter aimed at contributing to climate change adaptation and the Millennium Development Goals¹⁰ and for the Dutch water sector to benefit from economic opportunities. The interdepartmental programme Water Mondiaal provided follow up. The programme aimed at contributing to improved water management in, among other countries, five partner 'delta countries' (Bangladesh, Egypt, Indonesia, Mozambique, Vietnam) for Dutch bilateral development assistance as mentioned above. Of these, during the review period Egypt and Vietnam became exit countries, with which bilateral development cooperation was ended. Colombia and Myanmar were included. Other areas of overlap were instruments with water as one of the themes created the Ministry of Foreign Affairs for different policy goals such as private sector development. Part of instruments across the domains was administered by the Netherlands Enterprise Agency of the Ministry of Economic Affairs. Interdepartmental mechanisms were created for enhancing water policy coherence, steering and coordination.

In 2016, interdepartmental cooperation between the MI&E, the MEA and the MFA resulted in a joint policy letter entitled *Converging Streams – International Water Ambition* (IWA 2016-2021). This policy aimed to provide a coherent interdepartmental policy framework linking policy, integrating efforts and supporting new opportunities, intended to contribute to the prevention of floods, water shortages and pollution and to improve water governance and the position of vulnerable groups, with a focus on urban deltas and on the earning potential of the Dutch water sector. The expected outcome was that the water safety and water security of urban deltas, and the Dutch role in them, would improve (IWA 2016, p. 2). The Dutch role was envisaged in terms of engagement in shaping and implementing this policy as well as in the profitable engagement of the Dutch water sector in these urban deltas.

1.4 Methodology

Terms of Reference, policy field demarcation and evaluation questions

The terms of reference (ToR) for the policy review were prepared in consultation with a reference group of key stakeholders: the relevant MFA policy departments (Inclusive Green Growth (IGG) and Finance and Economic Affairs (FEZ)); MI&E; the Ministry of Financial Affairs; the Netherlands Enterprise Agency (RVO) of the MEA; and three external experts. The ToR demarcate and describe the policy field, define the evaluation criteria and present the relevant questions and methodology for the review. A short version of the ToR is attached as Annex 1.

⁹ At the time, this was the Ministry of Transport, Public Works and Water Management, and in November 2017, this became the Ministry of Infrastructure and Water Management.

¹⁰ In September 2000, world leaders adopted the United Nations Millennium Declaration. The Declaration committed nations to a new global partnership to reduce extreme poverty, and set out a series of eight time-bound targets – with a deadline of 2015 – that became known as the Millennium Development Goals (MDGs).

To demarcate the policy field, an inventory was made of the MFA (co-)funded projects, programmes and facilities, registered as 'activities' in the financial system of the Ministry of Foreign Affairs, that had a significant water management focus or component and ended or were ongoing after 2007 up to the end of 2016." The 2007 cut off point was justified so as to ensure that the activities were a product of the evolving policy for the period covered. The total number of identified activities over the review period was 225. The list of identified activities is attached as Annex 2. The review covers expenditures for the identified activities between 2006 and 2016.

Based on the portfolio of activities, three broad thematic areas were distinguished: (1) water management in agriculture; (2) (sub) national water management planning and implementation; and (3) transboundary water management. Documentation on the activities by thematic area was used to infer logical relationships between resources, activities/outputs and expected outcomes, in order to derive evaluation questions on policy effectiveness and efficiency by thematic area. In addition, efficiency questions were posed on organisational and operational aspects.

In performing the review, the water management themes identified in the ToR were slightly adjusted in order to capture better the scope of the portfolio of activities. A few evaluation questions were adjusted for more focused information gathering, while remaining in line with the central themes for the policy review.

The question in the ToR on cost effectiveness for water management in agriculture – 'what have been the costs of supported activities compared to the number of beneficiaries and their water productivity and agricultural production benefits?' – could not be addressed, due to the lack of the required data.

¹¹ The identification of activities with a significant water management focus or component was done through searches using SBEs (MFA budget sub management units) and CRS purpose codes (OECD/DAC) related to water, and through subsequent review of appraisal memoranda about these activities. Activities with a significant water management focus or component turned out to be funded across a number of SBEs, as Annex 2 shows.

Box 1 *Evaluation questions*

Policy overview

- 1. Why was the MFA development aid policy for improved water management taken up and what was the policy for the period 2006-2016?
- 2. In what way was the policy implemented? Did the policy to engage the Dutch water sector manifest itself in new policy mechanisms? What were the intervention strategy and scope of activities?
- 3. What were the expenditures centrally funded and funded from delegated Embassy budgets, by thematic area, channel of implementation, budget holder and the geographic distribution?
- 4. In what way were policy results reported about? What evaluations are available?

Effectiveness

Water management in agriculture

- 5. Did MFA support contribute to sufficient quality and quantity of water at the right time available to farmers and to an improved relation between the quantity of water used and agricultural production?
- 6. Did the MFA support contribute to an enabling environment for and capacity of Water User Groups and Associations (WUGs/WUAs) for operation and maintenance (O&M) of water infrastructure in a participatory way, also to augment abilities of individual farmers to use representation, knowledge and skills to improve their access to water and on-farm (water) management?
- 7. Did farmers pay for WUA services provided and do WUAs transparently account for funds received and expenditures?

(Sub) national water management

- 8. Did MFA support contribute to approved water management plans?
- 9. Did the water management plans include principles of integrated development and management of water, stakeholder participation and transparency of processes, equitable development without compromising vital ecosystems?
- 10. Did MFA support contribute to strengthening of the enabling (political, institutional, information, water infrastructure and O&M) environment for actual implementation of the plans?
- 11. Were budgets for implementation of water management plans allocated and plans implemented?

Trans-boundary water management

12. Did MFA support contribute to strengthened institutional arrangements and formal agreements over trans-boundary water sharing, allocation and management between countries; do these take into account global norms for international water streams?

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- 13. Did MFA support contribute to a strengthened enabling (political, institutional, water infrastructure development and O&M) environment for actual implementation of arrangements and agreements?
- 14. Did governments of riparian countries allocate budgets and/ or take other measures to follow up and sustain arrangements and implementation of agreements, including joint monitoring?

Broader and cross-cutting policy themes

- 15. Have improvements in water management come about while also issues of climate change, environmental sustainability, good governance, gender and poverty were addressed?
- 16. Have improvements come about while maintaining or improving water management benefits for lower income groups and women beneficiaries?
- 17. Did the Dutch water sector become more involved in achieving aid policy objectives? Were the reputation and economic opportunities of the Dutch sector enhanced?

Efficiency

- 18. Was the MFA able to fulfil its role as expert, broker and diplomat in enhancing collaboration between concerned actors within the Dutch government, the Netherlands and within partner countries, and enhance complementarity and synergy of activities?
- 19. Was policy implementation adequately organised and operationalised in support of achievement of intended key results, with reference to functioning Water User Groups (WUGs)/Water User Associations (WUAs), maintenance of physical infrastructure, results of water management plans and implementation and trans-boundary arrangements and agreements?
- 20. Did the involvement of the Dutch water sector lead to approaches and techniques that are relevant and practical for intended beneficiaries to use?

Future policy

- 21. What measures should be taken to increase effectiveness and efficiency?
- 22. What measures should be taken in case of a 20% reduced budget and of a 20% increased budget?

The policy evaluation made use of multiple information sources – available documentation on activities; information gathered from IOB partner country and activity studies; and notes on interviews with a wide range of stakeholders in partner countries and in the Netherlands, further detailed below. The study applied triangulation, meaning the use of different methods and information sources to arrive at a wide breadth of information, analyse evidence carefully and base findings on information that is validated from multiple sources.
The documentation on activities that was available includes mid-term and end of activity or ex post evaluations. 49.6% of expenditures was covered by evaluations (mid-term evaluation reports covered 30.2% and end of activity or ex post evaluation reports 19.4%). The reports served as an information resource to a limited extent, as the studies concerned had not been designed to address the evaluation questions set out for the policy review. The reports were reviewed mainly to help derive the main findings on effectiveness and efficiency. Whether these criteria were addressed and how this was done varied between the reports. Nevertheless, the reports were helpful for providing narrative information and for deriving patterns in performance across groups of activities. The evaluations were almost all commissioned to external agencies. Most reports were found to be of acceptable quality (for more information on the quality of the evaluations see section 2.3).

To complement the available secondary information, IOB undertook four country case studies. The countries selected were the partner countries for Dutch bilateral cooperation for which the Dutch ODA expenditures for water management over the review period were highest. They were Bangladesh, Indonesia, Mali and Mozambique. For these country case studies, separate reports were prepared (IOB, 2017a; 2017b; 2017c; 2017d). The studies included a mission to each of the countries during which various project sites were visited¹² and interviews with a wide range of stakeholders were held, including Focus Group Discussions (FGDs) with groups of intended final beneficiaries. The country case studies explored a set of identified assumptions underlying the Dutch water management policy and strategic plans for those countries. Key identified assumptions studied were:

- 1. The policy emphasis on the IWRM principle of participatory water management leads to the assumption that water users do indeed contribute significantly to the management and maintenance of water infrastructure.
- 2. In common property resource management such as in community-based water management in agriculture – it is assumed that the interests of the poor, women and the better off around water resources can be reconciled, so that all groups can work together and development and economic growth can be inclusive.
- 3. The policy assumes that integrated water management plans lead to meaningful, effective action.
- 4. Linked to this is the assumption that it is socially and institutionally feasible to achieve significant improvements in the quality (including the transparency) of water management institutions.
- 5. Another pervasive assumption is that there is political will at the various necessary levels for Netherlands-supported policy and institutional initiatives to be converted into meaningful action.
- 6. It was assumed that ecological approaches and targets could be effectively integrated into the strategies and objectives of the interventions.
- 7. For TWM, an obvious assumption was that regional co-operation is politically and institutionally feasible.

¹² Except in Mali, where interviews were restricted to the capital city.

- 8. From the technical perspective, the policy assumes that the paradigms and approaches for water management that the Netherlands promotes and supports are in fact relevant and appropriate.
- 9. The consequent assumption is that the techniques used in Netherlands-supported water management interventions are feasible, practical and affordable in local conditions.
- 10. A prominent assumption underlying Netherlands water management policy is that Dutch expertise can add value and fill gaps in locally available knowledge and expertise.
- 11. A related assumption is that Dutch and local expertise (along with other external expertise that may be available) are complementary and synergistic. Ideally, the whole should be more than the sum of its parts.
- 12. It has been assumed that significant results could be achieved through piloting and partnering arrangements, through which the Netherlands' government direct input would be relatively modest, but would be complemented by other resourcing to achieve larger-scale and/or post-pilot implementation.
- 13. As the policy emphasis on Dutch water sector engagement grew, the assumption was that such engagement was relevant and could be effective for achieving the objectives of water management interventions; and support Dutch trade and investment opportunities as well.
- 14. The review period saw substantial growth in the number of instruments, facilities and mechanisms deployed in an increasingly interdepartmental Netherlands water management policy and strategy. As applied, this required the assumption that this suite of methods and tools were complementary and could be applied effectively and efficiently.

As part of the country case studies, and in some cases additional to them, three to four major Dutch-supported programmes or projects were selected for more in-depth study for each of the three distinguished water management themes. For two of these (the Bangladesh Blue Gold Project and the Indonesia ADB Participatory Irrigation Support Programme/ World Bank Water Resources and Irrigation Programme) IOB conducted impact studies, applying quasi-experimental methods and a mix of information gathering tools, including household surveys and beneficiary FGDs (Heun and Kessler, 2016; Schenk and Heun, 2017). For another five of these activities, qualitative field study was done as part of the country case studies. For four of these, use was made of available evaluation reports and further information was gathered through interviews of stakeholders.

Annex 6 provides a list of interviewees, showing the range of stakeholders and other informants that were interviewed in the Netherlands and abroad.

The responsible MFA policy department has addressed question 22 on measures in case of a 20% budget decrease or increase.

Limitations of the policy review

A policy review of Dutch development aid policy for improved water management is far from easy, as it covers different kinds of projects, programmes and facilities, various partly overlapping thematic areas, and many partners through which development assistance was provided in a large number of countries. Such a review is bound to have limitations. As explained above, a limitation at the outset was that a (final) evaluation report was only available for some of the funded activities and that, furthermore, the evaluations had not been designed to answer the questions set out for this policy review. IOB country studies added valuable information on policy performance. Through a combination of document review, country and activity studies, project site visits and interviews of a broad range of stakeholders and other informants in partner countries and in the Netherlands, the information gathered achieved sufficient breadth and depth for answering the policy review questions and could be validated from multiple sources. Limitations in the evidence base have thus been taken into account.



Policy overview

This chapter addresses questions 2-4 on the policy overview. Question 1 on the rationale and the policy is addressed in chapter 1. Chapter 2 provides information about the way in which the MFA aid policy for water management was implemented, about the portfolio of activities, and about expenditures and results reporting. Sections 2.1, 2.2 and 2.3 below address each one of the questions presented in the box below.

Evaluation questions

Policy overview

- 2. In what way was the policy implemented? Did the policy to engage the Dutch water sector manifest itself in new policy mechanisms? What was the intervention strategy and scope of activities?
- 3. What were the expenditures centrally funded and funded from delegated Embassy budgets, by thematic area, channel of implementation, budget holder and the geographic distribution?
- 4. In what way were policy results reported about? What evaluations are available?

2.1 Policy implementation

Organisational setting and policy mechanisms

The Inclusive Green Growth (IGG) Department¹³ of the Directorate General for International Cooperation (DGIS), was the unit of the MFA with principal responsibility for the development aid policy for water management, for policy wide coordination of water related activities and for water management activities funded from the IGG budget. Dutch embassies in partner countries were the principal responsible units for plans and activities funded from their delegated budgets. Thematic experts posted at IGG and embassies played a central role in policy making and implementation. IGG and embassies interpreted the evolving policy presented in chapter 1.2 in Multi-Annual Strategic Plans (MASPs, later replaced in some embassies by Multi-Annual Interdepartmental Policy Frameworks (MIBs)) and in annual plans and budgets. IGG had an advisory role in the approval of the embassies' plans. A few water management activities were funded from the budgets of other MFA departments. IGG was also the thematic focal point for these activities. From 2012, MFA contracted out the management of some of its activities that engage the Dutch water sector to the Netherlands Enterprise Agency (RVO) of the MEA. In this role, RVO collaborated closely with the Netherlands Water Partnership, a network organisation for the Dutch water sector. With some countries, notably Indonesia and Myanmar, the Netherlands signed memoranda of understanding to provide a shared framework of policy and priorities for co-operation in water resource management.

Another development was the creation of inter-ministerial mechanisms for enhancing policy coherence in Dutch international water policy and for steering and coordinating implementation of the programme *Water Mondiaal* and, later, the interdepartmental International Water Ambition policy. These comprised a steering committee of Directors of concerned Directorates (four of MI&E, one of MFA and one of MEA); an interdepartmental water cluster of MFA and MI&E staff; and, for each of the priority seven delta countries (of which three were partner countries for development cooperation), a coordinator (staff member of either MFA or MI&E) and a 'delta team' of staff of the concerned Ministries, Embassy and RVO and other parties involved, such as the NWP and Dutch Water Authorities (DWAs).

Intervention strategy

As explained above, each budget holder (embassy or department) prepared Multi-Annual Strategic Plans that explained the strategy. The two main MASPs of the IGG department that steered policy implementation and approval of financing requests for water management activities from the IGG budget over the review period were those for the periods 2008-2011 and 2012-2015. The MASPs reiterated key policy principles and ambitions and identified strategic partners with and through whom development support was provided.

The first MASP (2008-2011) reiterated the principle of IWRM, taking the interests of all groups and sectors as starting point. For improved water management and governance in specific countries and watershed areas (including climate change), IGG was to work together with Dutch embassies in these countries; knowledge organisations, e.g. UNESCO-IHE¹⁴; technical Ministries, e.g. MI&E; river basin organisations, e.g. the Nile Basin Initiative and the Niger Basin Authority; specialised international organisations, e.g. the Global Water Partnership (GWP) and International Union for Conservation of Nature (IUCN); and donors. Support to basin organisations was to focus on capacity building. The policy dialogue was to be focused on strengthening the link between water management and poverty reduction and using transboundary water management for improved regional cooperation. In view of the importance of capacity building in the sector and the Dutch added value in this area, cooperation with both international and Dutch knowledge organisations was to be central in the programme. This concerned knowledge organisations, e.g. the International Water Management Institute (IWMI), UNESCO-IHE and the Wageningen University and Research (WUR), and specialised NGOs and Dutch technical Ministries (MASP 2008-2011, pp. 4-5).

The second MASP mentioned as two specific objectives for water management: (1) efficient and sustainable water use, in particular in agriculture; and (2) safe deltas and improved watershed management in selected target countries and watershed areas, as per the policy letter *Water for Development* of 2012. The strategy included a multi-annual results perspective with multiple elements: (1) to have optimal synergy between the policy spearheads water and food security; (2) to pay attention in water programmes to the safeguarding of ecosystems and climate change adaptation; (3) in implementation, to work with embassies, the Dutch water sector, MI&E and MEA, international organisations and development

¹⁴ As from I January 2017, UNESCO-IHE is the IHE Delft Institute for Water Education.

banks; (4) to intensify cooperation in five to seven countries through the Water OS programme together with MI&E, MEA and the Dutch water sector; (5) through the multilateral channel, complementing bilateral efforts where possible, to contribute to water management via the World Bank (WB), Asian Development Bank and the GWP; capacity building through organisations such as UNDP and UNESCO-IHE; and to water storage and irrigated agriculture through the International Fund for Agricultural Development (IFAD); and (6) to start a water facility of EUR 30 million a year for financing public private partnerships involving representatives of the NWP, companies and the MEA. To maximise effectiveness, attention was to be paid to good governance, gender, capacity building and prevention of corruption. To shape an integral programme for water, climate and environment, strategic substantive involvement of the MFA was to be ensured and involvement of young professionals and safeguarding of capacity was to be stimulated though a special Young Expert Programme (MASP 2012-2015, p. 3).

Portfolio of activities

A brief description of the portfolio of 225 activities shows the scope, including its heterogeneity. The review divided the activities into the themes (1) water management in agriculture, (2) (sub) national water management, and (3) transboundary water management, and (4) a set of cross-cutting policy themes. This last category comprised activities that were specifically designed to integrate a cross-cutting theme in a water management project or programme.¹⁵ It turned out that many activities were in support of more than one theme. These activities were labelled as theme 5, 'Across Water Management'. The activities had various thematic overlaps as shown in Figure 2.1 below. The overlaps made it impossible to fully group activities by distinguished theme. The sections of chapter 3 on effectiveness by each distinguished theme, however, refer to activities with the thematic label as well as to activities that include the theme as a component.

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Figure 2.1 (Sub) themes and thematic overlaps

Activities funded from the central MFA budget

Annex 2 provides a full list of the identified activities funded from the central budget (in total 63 centrally funded activities). Below is a summary by water management theme of the main organisations and activities through which policy was implemented during the review period with funding from the central budget.

 For water management in agriculture/efficient water use/crop per drop in agriculture (WMAg): projects on food and water security through the International Centre for Research in Agroforestry (ICRAF); the IFAD Adaptation for Small holders in Agriculture Programme in selected water stressed countries in Africa; co-funding of an USAID executed PPP Fund for subsidising innovation in securing water for food in water scarce areas; and an FAO project for remote sensing to monitor land and water use and increase of productivity.

- 2. For (sub) national water management ((S)NWM): a project of the Global Water Partnership (GWP) implemented through country partnerships for support to IWRM planning in six selected countries in Africa; the IUCN Water and Nature Initiative supporting an ecosystems-based IWRM approach; and more recently co-funding of an RVO administered Partners For Water (PvW) project for development and implementation of water policy and creating opportunities for Dutch enterprise in Myanmar; and the Dutch Disaster Risk Reduction (DRR) team aiming at increasing the flexible support of the Dutch water sector in relation to planning for and mitigating the impact of water-related disasters.
- 3. Transboundary water management (TWM): co-funding of the WB-administered Nile Basin Trust Fund (NBTF) for improved regional cooperation; a WB Trust fund for support to the Organisation pour Ia Mise en Valeur du Fleuve Sénégal (OMVS) for removal of the typha plant blocking rivers and impeding local development along the affected rivers; and co-funding of a WB trust fund and partnership programme 'Cooperation in International Waters in Africa' (CIWA) to support riparian governments in Sub-Saharan Africa to address constraints to cooperative management and development of international waters. In addition, support was provided through smaller projects and programmes, such as two projects of Wageningen University & Research – on interdisciplinary research and capacity building on peasant and Indigenous water management and policies in the Andes, and on regional capacity building on water resource management and gender and water in South Asia; the Hydrological Cycle Observing Systems (HYCOS) project for the southern Africa region; and the capacity building programme of the Middle East Desalination Research Centre (MEDRC).
- 4. For activities focusing specifically on a cross-cutting policy theme (CCPT): (1) for climate change adaptation during the early stage of the review period, the Vrije Universiteit Amsterdam Institute for Environmental Studies (VU-IVM) project ADAPTS, designed to support piloting of local measures; and later the WB-administered Global Environment Facility (GEF)/Least Developed Countries Fund (LDCF), designed to develop and support national action plans; (2) for environment, a World Wide Fund for Nature (WWF)/CARE project to identify innovative funding mechanisms for environmental services in watersheds and, also through WWF, a project to safeguard fresh water in order to reduce poverty in some selected river basins; (3) for good governance, the Water Integrity Network, an international NGO aiming to address corruption and improve integrity in the water sector; and (4) for gender, support through the Dutch Women's Council and the Gender and the Water Alliance (GWA) for enhancing women's participation and gender mainstreaming in water.
- 5. For activities for across water management themes (AWM): (1) core funding of the independent intergovernmental Global Water Partnership, a global action network of public and private actors with 13 Regional Water Partnerships and 86 Country Water Partnerships aiming at promoting water as a key part of sustainable development; (2) co-funding of partnership programmes of MDBs (the World Bank, Asian Development Bank and the Inter-American Development Bank) providing access to knowledge and

funding support to the banks for analytical work, technical assistance and for advancing knowledge sharing processes influencing the quality of investment projects; (3) funding of water management programmes, projects and facilities of knowledge organisations, such as through UNESCO-IHE, CAP-NET (the UNDP-administered network for capacity building in IWM), WaterNet for the Southern African Development Community (SADC) region, the Netherlands Organisation for Scientific Research (NWO/WOTRO) research facility Urbanising Deltas of the World (UDW), Wageningen University & Research (WUR) and the International Water Management Institute (IWMI); (4) RVO-administered MFA-funded programmes and facilities that engage the Dutch water sector, in particular the Water OS programme that started in 2011 to support embassies in the programming and implementation of their water programmes with involvement of the Dutch water sector in connection with the programme Water Mondiaal; the Sustainable Water Fund (SWF), established in 2012, subsidising innovative projects of public-private partnerships (PPPs) with Dutch partners; the Young Expert Programme (YEP), providing MFA co-funding for the employment of young Dutch and local experts by Dutch sector agents abroad to help build and sustain the pool of experts; the Disaster Surge Support Facility Water, set up in 2014 to contribute to well-coordinated, effective and efficient aid in cases of water related disasters; and the PPP innovation programme of the Dutch NGO Aqua for All, working with partners to finance innovative proposals to solve problems related to water.16

Activities funded through embassies' delegated budgets

The majority of the activities reviewed, 162 out of 225, were funded from budgets that had been delegated to Dutch embassies for bilateral cooperation with selected partner countries. These activities are outlined below. Further information on these activities is given in section 3.1 on water management in agriculture, section 3.2 on (sub) national water management and section 3.3 on transboundary water management; as well as the reports on the country case studies (IOB, 2017a; 2017b; 2017c; 2017d).

Using the same categories as for the centrally funded activities, the delegated activities consisted of the following.

- 1. Water management in agriculture projects pursuing agricultural development and food security objectives and/or water use efficiency and productivity objectives: a total of 30 activities, implemented by recipient governments together with private, including Dutch, technical services and engineering companies and/or multilateral organisations. Irrigation and drainage of agricultural land, and associated capacity building and institutional development, were common project themes in this category, with some activities taking on a range of related rural and agrarian development objectives.
- 2. National and sub national water management planning projects (IWRM planning, river basin, coastal area, delta and disaster management planning): a total of 23 activities; and implementation projects (flood management, river management, coastal
- ¹⁶ The previous phase of A4A that ended in 2014 focused only on water supply and sanitation. For the new phase, EUR 10 million was allocated for the original PPP fund, focusing on WASH activities, and another EUR 10 million for the ViaWater Fund for water management.

defense and development, disaster management, vital ecosystems enhancement): a total of 52 activities. These activities were implemented through recipient governments together with private companies and/or multilateral organisations or NGOs. While some of them were wide-ranging efforts to link enhanced water management to more sustainable livelihoods for the rural poor, most of the efforts at urban drainage and flood management, more recently linked to the IWA, fell into this category too.

- 3. Transboundary water management projects: a total of 16 activities with governments, NGOs and multilateral organisations aiming at regional cooperation for improved water management planning and/or implementation such as through research, flood monitoring and warning systems, and dredging of transboundary rivers.
- 4. Projects that were specifically designed in support of a **cross-cutting policy theme**, implemented through multilateral organisations, NGOs and knowledge institutions. In total, nine delegated activities had a specific focus on a cross-cutting policy theme, mainly on environmental aspects. One activity (through the WB, in Pakistan) focused on governance aspects.
- 5. Water management activities **across water management themes**: a total of 32 activities, mostly implemented through knowledge organisations and NGOs. As with the centrally funded AWM activities these were primarily for IWRM promotion, research, capacity building and networking, but also comprised, for example, water related conflict assessments for Yemen.

Other relevant Dutch government facilities

The MI&E funded programme Partners for Water (PvW), designed to engage the Dutch water sector in providing solutions to water problems abroad, was also active in some of the partner countries for development cooperation. The programme was administered by RVO and managed in collaboration with the MI&E and NWP. The PvW funding was classified as a non-ODA part of the 'Homogenous Group International Cooperation' (HGIS) budget category of the Government of the Netherlands (GON). The PvW programme components were: (1) stimulation through a subsidy facility and budget for Dutch water sector technical services assignments; (2) collaboration through country platform meetings for exchange and networking of Dutch water sector actors; and (3) communications/events. In countries such as Indonesia and Mozambique, PvW became an important instrument for more flexible funding in the adaptive management of the portfolio, in consultation between the MI&E, MFA and RVO, starting off and/or complementing projects that were implemented with delegated funding through the embassies.

There were other funding instruments that were designed to engage Dutch actors, including in the water management sector. For example, the 'Develop2Build' facility was a government to government programme that offered direct assistance in 37 countries for setting up infrastructure projects; 'ORIO', and its successor 'DRIVE', aimed to facilitate investment in public infrastructure projects that promoted private sector development, with over 60 ODA recipient countries eligible. All of these were administered by RVO. In addition, the MFA-funded Netherlands Initiative for Capacity Building in Higher Education (NICHE) aimed to sustainably strengthen education and training capacity in developing countries. The programme was administered by the Dutch organisation for internationalisation in

education, Nuffic. It focused, among other priority themes, on the MFA priority theme of water. These instruments were funded from other policy budget lines and fall outside the scope of this policy review; but they added to the increasingly complex constellation of mechanisms with which the Netherlands sought to engage with partner countries through private as well as public sector participation, magnifying coordination challenges.

2.2 Expenditures

The total expenditures over the review period 2006-2016 for the identified portfolio of activities were EUR 871 million. Of this, 41% (EUR 358 million) was spent on the 63 centrally funded (mostly global, regional and multi-country) activities, and 59% (EUR 513 million) on 162 activities funded from budgets delegated to embassies for bilateral cooperation.

Central and delegated budgets

Figure 2.2 below shows that, as expected, the budget for (sub) national water management, and to a lesser extent water management in agriculture, were mainly financed from the delegated budgets, while the budget for transboundary water management was financed more equally from the central and delegated budgets. The budget for activities that were specifically designed for a cross-cutting policy theme and those for more than one thematic area were primarily financed from the central budget.



Figure 2.2 Central and delegated budgets by thematic area, 2006-2016

Figure 2.3 shows the central and delegated expenditures by year and by thematic area over the review period. Up to 2012 most funding was through embassies' delegated budgets, with an average annual expenditure of EUR 46 million. The average annual amount funded from the central budget was considerably lower, at EUR 17 million. Following the focus letter Development Cooperation of 2011 that led to the reduction of the number of partner countries, the annual delegated expenditure became less (EUR 33 million in 2012). At the same time, expenditures from the central budget increased from EUR 17 million in 2011 to EUR 69 million in 2012.¹⁷ The central expenditures dropped in 2014 (EUR 29 million) but in 2016 again reached EUR 68 million. Delegated expenditures remained on average at the same level from 2012 onwards. Central and delegated expenditures combined in the 2012-2016 period were 54% higher than in the 2006-2011 period.

Expenditures on (sub) national water management (EUR 25 million/year) and water management in agriculture (EUR 18 million/year) were primarily funded from the delegated budget (95% and 65% respectively), although in 2012 and 2016 the central expenditures on water management in agriculture were higher. This is mainly explained by expenditures for the IFAD adaptation for smallholder agricultural programme and the ICRAF enhancing water and food security project.

Expenditures on transboundary water management were more or less the same from the central budget and from the delegated budgets (around EUR 10 million per year). With regard to activities that were specifically designed to support cross-cutting policy themes, the most noticeable is the increase in 2012 (up to a total of EUR 26 million) and in 2013 (up to EUR 21 million), which is explained by one activity: the support to the Least Developed Countries Fund for Climate Change of the WB-administered Global Environment Fund (GEF) Least Developed Country Fund (LDCF) programme on climate change. For the other years, the expenditures on specific CCPT activities from central and delegated budgets were about the same (in total EUR 5 million/year).

The expenditures for activities that were designed in support of more than one thematic area increased considerably over the review period from less than EUR 12 million per year before 2011 to on average around EUR 30 million in each of the last three years. Nearly 85% of the expenditures concerned centrally funded global, regional or multi-country activities. Of these, the Sustainable Water Fund (SWF), the ADB's Water Financing Facility and the WB's Water Partnership Programme (WPP) had the largest share.

¹⁷ Two activities account for most of this increase (EUR 45 million): the IGG-funded GEF LDCF for Climate Change, and the ICRAF programme for enhancing water and food security for rural economic development in selected countries in Africa with input of Dutch Parties.



Figure 2.3 Annual central and delegated expenditures by thematic area, 2006-2016

Out of the portfolio of 225 activities, 56 contained an MFA-funded physical infrastructure component. The total MFA expenditures for these activities were EUR 374 million, equal to 43% of total expenditures. Of the funding for activities with a physical infrastructure component, 70% was allocated through the embassies' delegated budgets. In 35 activities, physical infrastructure was the main focus, with a total disbursement of EUR 292 million – equal to 34% of the total expenditures. It was not possible to distil from the available information the exact expenditures on the physical infrastructure components. It should be noted that some of the activities were co-funded with MDBs who usually funded (most of) the physical infrastructure through loans. EUR 109 million of the MFA funding for projects with a physical infrastructure component was channelled through MDBs (WB and ADB); the ADB Water Financing Facility received the biggest share.

Expenditures by channel of implementation

Figure 2.4 below shows the expenditures by channel and sub channel of implementation. MFA's management information system follows the OECD/DAC in recording the implementing agencies and categorisation of channel of implementation. OECD/DAC prescribes that an activity cannot have more than one implementing agency. This is the party managing the activity and responsible for reporting to the budget holder. In the management information system (MIS), the implementing agency is called the 'MFA relation'. The MFA relation is shown in the attached list of activities (Annex 2). A few activities in the portfolio are distinguished as 'umbrella activities' with 'multiple parties' as implementing agencies, mostly programme support funds (POF), with a total EUR 1.6 million of expenditures.

The agencies were categorised in line with the DAC channel code system as follows:

- 1. Public sector: donor (Dutch) government (RVO), recipient government, third country government (delegated cooperation);
- 2. Multilateral organisations: United Nations (UN), Multilateral Development Bank (MDB), Regional Development Bank (RDB);
- 3. Non-governmental organisations and civil society: international NGO, donor countrybased NGO, developing country-based NGO;
- 4. Knowledge institutions: university, college or other teaching institution, research institute or think-tank;
- 5. Public -private partnerships;
- 6. Networks;
- 7. Private organisations/consultancy organisations.

Figure 2.4 below shows that the centrally funded expenditures mostly concerned specialised UN organisations, MDBs, PPPs and knowledge institutions.¹⁸ Delegated development assistance was mostly provided through recipient governments, regional development banks (RDBs), knowledge institutions, consultancy firms and to a lesser extent (international) NGOs. The private organisations funded from delegated budgets were consultancy firms to which water management projects or project components were contracted out. Expenditures through knowledge institutions were funded from both central and delegated budgets and comprised a substantial share of the total.



Figure 2.4 Expenditures by channel of implementation

¹⁸ In the MIS, the selected channel for activities of UNESCO-IHE was 'multilateral organisations'. These activities have been moved to 'knowledge institutions'.

Expenditures by budget holder

The expenditures for the 225 activities over the review period were disbursed through 26 MFA budget holders, of which 21 were embassies. The main central budget holder was IGG (57 of 63 centrally funded activities). The other four central departments funded a total six water management activities within their respective mandates. Of these other budget holders, the department for the UN and international financing institutions (DMM, previously DVF) had the highest disbursements, (co-)funding the Nile Basin Initiative (expenditures EUR 10.6 million) and the WB Water Partnership (EUR 23.1 million), the latter later funded from the IGG budget. The Department for Cultural Cooperation, Education and Research (DCO) spent EUR 1.9 million during the early part of the review period on two relatively small research and capacity building activities. The Sustainable Economic Development Department (DDE) spent EUR 0.3 million on one such activity.¹⁹ A recently approved ongoing activity concerns the Dutch Surge Facility Water, funded by the Stabilisation and Humanitarian Aid Department (DSH) and administered by RVO, with expenditures amounting to EUR 1.0 million.

Geographic distribution

The next figure (2.5) shows that, in addition to the focus countries, water management activities were financed through delegated funding in a number of other countries, like Suriname, Pakistan and Mongolia (through the Netherlands Embassy (EKN) in China).

¹⁹ The DCO activities concerned the ATPS Water and Environment project (EUR 0.7 million) and the WUR concertation, research and capacity building on peasant and indigenous water management and water policies in the Andes (EUR 1.1 million). The DDE activity was the IWMI Comprehensive assessment of Water Management in Agriculture, showing very low disbursement of less than 5% of the allocated amount (EUR 3.3 million).



Figure 2.5 Expenditures by delegated budget holder, 2006-2016

The number of countries listed in appraisal documents for all funded activities are many more than those listed in Figure 2.5: a total of 90 countries. The activities concerned either a single country, a group of selected countries, a region or had worldwide coverage. Activities that covered more than 50 countries, or for which countries were not specified, were labelled 'worldwide'.

As shown by Figure 2.6, 31% of the expenditures over the review period were for activities in Asia, 34% in Africa, and 7% in Latin America. The remaining 28% of the expenditures concerned activities that cut across regions and were labelled 'worldwide'.

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2.3 Results reporting

Over the review period, the MFA informed the Dutch parliament about its results in water management as part of its reporting on development results. The way the MFA defined results changed over time. Until 2010, the MDGs were used as a reference. IWRM was linked to a sub goal of MDG 7 (ensure environmental sustainability): 'to reduce biodiversity loss and achieve a substantial reduction in the rate of loss by 2010'. Results were described according to output, outcome and impact results chains but without systematically linking these to the underlying registered activities and without using SMART²⁰ indicators.

From 2012, the result reports provided an overview of activities per policy objective and presented information on which activities had contributed to which result areas. Indicators per result area were developed, divided into mandatory and non-mandatory indicators for use by budget holders to report on results. The questions and indicators did not change (much) after 2012. The indicators for efficient water use in agriculture focused on the ratio between crop yield and water use (water productivity). Non-mandatory indicators were added on drainage and wastewater reuse. For the policy objective of improved river basin management and safe deltas, the results reports mapped progress in the development and implementation of water management plans and in improvement of TWM and joint river basin management. In 2013, another result area was developed to report on the added value of the Dutch water sector and the transition from aid to trade. In 2016, an aggregate indicator for the result area 'improved river basins and safe deltas' became 'the number of people benefiting from improved river basin management and safe deltas'. Remarkably, the indicator was not linked to the SDG target for water resource management, being 'by 2030, implement IWRM at all levels, including through transboundary cooperation, as appropriate' (SDGs 2015, p. 18).

An issue for the results reporting throughout the review period was that the measurable results of many registered activities by their nature did not go beyond the policy input and activity levels. For example, the effects of activities focussing on IWRM promotion, research, capacity building and knowledge sharing at higher levels of intended policy outcomes cannot credibly be established through (embassies') annual reporting, as many other factors are at play and the empirical attribution of causality is a major undertaking. EKN staff report frustration with the time-consuming process of filling in monitoring templates, and think that a lot of the indicators are either impossible to report or not very meaningful. Part of the frustration may be explained also by the fact that the 2012 Water for Development policy letter and the MASPs for 2012-2015 were prepared simultaneously. Another issue was the mismatch between the indicators that embassies were asked to report on and their contractual arrangements with their partners.

A further issue is that the information collection for the results reporting did not include factors that drive or hinder the achievement of results – information that is important to improve performance. In theory, independent and external evaluation of projects, programmes and facilities can be an important (complementary) information source on policy performance. In practice, over the review period, evaluations were not an important information source for the reporting. As mentioned in section 1.3, evaluations of activities were not designed to address questions on policy performance. Most evaluations produced over the review period were mid-term or end of activity evaluations that primarily served the purpose of supervision and management and/or providing the basis for design of a further phase of the activity. The decision to conduct an evaluation was in most cases left to the discretion of the MFA and/or other concerned donor(s), MFA budget holders and/or implementing agencies.

Moreover, the number of evaluations of activities was lower than expected. Evaluations are prescribed by MFA for activities with expenditures of EUR 5 million or over. The study found 17 evaluations (12 end or ex post evaluations and five mid-term evaluations or reviews) for the total of 32 completed projects with a budget of EUR 5 million or above. For 22 out of 99 completed projects with a budget of over EUR 1 million, end of project or ex post evaluations could be traced. For 31 out of 162 projects with a budget of over EUR 1 million, a mid-term evaluation was found. A more detailed overview of the mid-term and final evaluations that were found is attached (Annex 5).

Table 2.1 below shows the percentage coverage of total expenditures during the review period of activities with a mid-term and/or end of activity or ex post evaluation report, for each of the thematic areas distinguished by the review.

Table 2.1 Percentage coverage of expenditures, 2006-2016, by evaluations								
	Centrally funded activities	Delegated activities	Total					
Water management in agriculture	33%	46%	41%					
(Sub) national water management	53%	39%	39%					
Transboundary water management	74%	41%	55%					
Cross-cutting policy themes	74%	11%	55%					
Across water management	72%	38%	67%					
Total	64%	39%	50%					

The quality of the evaluations of activities, taking into account the often limited scope of the studies, was largely acceptable. For a sample of 29 evaluations (11 mid-term reviews and 18 final evaluations) the quality was assessed, using a set of quality criteria.²¹ These criteria were given a score, up to a maximum of 100%. Eleven reports scored between 50 and 74% and twelve reports scored 75% or higher. The study did not find any examples of baseline information for measuring change in outcome variables linked to planned interventions.

The development cooperation policy document *Focusbrief* 2011 (MFA, 2011) highlighted effectiveness as a policy principle. It stated that outcomes should be measurable and the baseline situation clear, in order to be able to measure progress. This applies to country strategies but also to multilateral and civil society organisations. Moreover, it should be clear why certain interventions have been chosen. Plans should be supported by evidence or by assumptions that can be tested (MFA, 2011, p. 5). The application of this principle leaves ample room for improvement.

²¹ Assessment indicators: operationalisation of evaluation criteria; operationalisation of results measurement by means of indicators, at least at two levels of the result chain; transparency and reliability of data sources, collection and analysis: description of process of data source, use of structured methods, verifies the causal chain step by step, explains influence of contextual factors; unambiguous conclusion on evaluation criteria applied; conclusions follow logically from findings.



Policy effectiveness and efficiency

The first three sections of this chapter answer the evaluation questions about policy effectiveness and efficiency that were posed by the ToR for each of the three water management thematic areas: water management in agriculture; (sub) national water management planning; and transboundary water management. Section 3.4 then assesses the ways in which various broader and crosscutting policy concerns were addressed through the implementation of MFA water management policy.

Sections 3.1 to 3.4 start by presenting the evaluation questions that the section aims to answer and the summary answers to the questions, followed by a brief description of the intervention logic and the portfolio of activities followed by evidence for the presented answers. It then gives a brief description of activities that were supported, followed by the findings on the effectiveness and efficiency of these activities. Section 3.5 discusses the other modes of support that the Netherlands provided, across the water management themes, through a range of modalities and activities such as partnership programmes of MDBs, the work of knowledge organisations and RVO-administered activities engaging the Dutch water sector. The chapter ends with a broad discussion of findings.

3.1 Water management in agriculture

Introduction

To ensure the availability of water in sufficient quantities and of sufficient quality to farmers, activities over the review period aimed to improve water management investments in 'hardware' (water infrastructure) and 'software' (water management institutions). This necessarily led to projects that targeted both physical infrastructure as well as improved (participatory) management of this infrastructure to ensure effectiveness and, most importantly, sustainability of the investments in infrastructure. However, during this first half of the review period, MFA's development policy did not include any policy objectives related to such projects.

Water use efficiency became an important theme in the MFA's development policy with the letter sent to Parliament in 2012 entitled *Water for Development*, which set out the water policy for the period 2012-2015. The policy objective mentioned in this letter with respect to water management in agriculture was to improve water productivity and the ratio of water consumption to agricultural yields by at least 25% in Dutch funded programmes (the crop/ drop ratio). Although the focus on agriculture was still there, the second objective was more narrowly defined: increasing crop production in relation to the amount of water used. The first objective was broader and included water management in agriculture as well, but not necessarily from an efficiency perspective; it can be seen as an extension of the implicit policy objective from the 2006-2012 period. The second objective was intended not as an objective in itself but as a focus or component that could be added to any activity in water-stressed areas that helps to enhance water efficiency.

This section addresses the evaluation questions on policy effectiveness and efficiency for water management in agriculture, as shown in the box below.

Evaluation questions

Effectiveness

- 6. Did MFA support contribute to sufficient quality and quantity of water at the right time available to farmers and to an improved relation between the quantity of water used and agricultural production?
- 7. Did MFA support contribute to an enabling environment for and capacity of Water User Groups and Associations22 (WUG/WUAs) for operation and maintenance (O&M) of water infrastructure in a participatory way, also to augment abilities of individual farmers to use representation, knowledge and skills to improve their access to water and on-farm (water) management?
- 8. Did farmers pay for WUA services provided and do WUAs transparently account for funds received and expenditures?

Efficiency

19. Was policy implementation adequately organised and operationalised in support of achievement of intended key results, with reference to functioning WUGs/WUAs, technical quality and maintenance of physical infrastructure?

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Summary: effectiveness

MFA support improved the quality, quantity and timing of water supplies to farmers in many cases, enhancing the efficiency of agricultural water use in some instances. However, such improvements are not a complete solution to low agricultural productivity. While agricultural productivity was enhanced by some of the water management initiatives that the Netherlands supported, it remained sub optimal in most cases and far too low in some. It is not possible to say if the target of 25% increased water productivity was met, although it does not seem likely. Actually, measuring performance against a target appeared to be difficult, if not impossible. Moreover, the challenges of technical and institutional maintenance were not convincingly addressed, so that the sustainability of the physical infrastructure remains in doubt.

In many countries, MFA support helped to strengthen water user representation and participation in water resource management for agriculture at local levels (such as polders and (sub) districts). Farmers, including women farmers, were empowered with better knowledge, skills and representation through efforts to strengthen participatory management. These significant achievements were constrained by the general failure to ensure ongoing institutional maintenance and, in some cases, by ineffective or corrupt

²² WUAs are meant here as a generic term that includes farmer-led water management organisations at different levels (tertiary, secondary, primary canal, polder) in different contexts, for example mainly for irrigation purposes or for flood protection. institutional frameworks at higher levels, and/or resistance or capture by local elites that limited the ability of poorer farmers to exploit the enhanced institutional framework and the improved water management infrastructure. Training and institutional development, in other words, are not enough.

MFA support generally promoted the concept of user payments for agricultural water management and/or supply, but had limited success in this regard. The policy assumption that water users contribute significantly to the management and maintenance of water infrastructure proved only partly correct. Local WUAs did often institute systems of user fees, without succeeding in achieving high or constant rates of payment. In Bangladesh, for example, not everyone in farming communities joined the local structures that projects established or revived, and not all who joined paid the fees (without explicit policy on waivers for the very poor). In Indonesia, institutional and regulatory obstacles still confronted efforts to consolidate a system of user fees on irrigated land. Also in Egypt, the sustainability of the irrigation schemes covered by the Integrated Water Resource Management Project (IIIMP) remained uncertain, since the collection of fees did not meet its targets and therefore cost recovery could not be realised (Euroconsult Mott MacDonald et al., 2014).

Summary: efficiency

Overall, the costs and duration of achieving key results in water management for agriculture deviated from what was planned. Time and cost overruns were common, leading to project extensions – some budget neutral and some with additional funding. The quality of outputs was generally satisfactory; their contribution to outcomes was mixed, and the sustainability of results for water users was in most cases doubtful because of challenges at all levels of the institutional framework for agricultural water management in partner countries. There was often a significant risk that the 'build, neglect, repair' cycle would be repeated, for physical infrastructure and for local water management institutions. Participatory irrigation management planning was sometimes subject to delays and cost overruns as the social and technical complexity of the local issues compounded political and institutional factors, contributing to slow performance and increased costs.

Description of thematic area

Intervention logic

The reconstructed graphic depiction shown below (Figure 3.1) presents the broad objectives of MFA policy for support to water management in agriculture, as well as the objectives of the more narrowly defined efforts to enhance the efficiency and productivity of agricultural water use. The graphic also shows the causal pathways along which interventions were meant to lead to the intended results.



Figure 3.1Reconstructed intervention logic water management in agriculture

The provision of funding and expertise was meant to support not only the construction or rehabilitation of physical infrastructure for agricultural water management, but also the required local institutions, with trained and empowered WUAs playing a central role in strengthened water management systems that would include user contributions to O&M and lead to increased water use efficiency and increased agricultural production.

Activities

The evaluation categorised 38 projects under the water management in agriculture theme. Of these, 25 were related to the first, broader theme of agricultural development, and 13 to the second objective of enhanced water productivity. Table 3.1 distinguishes these activities by country. The largest number of activities took place in Mali (12), but the largest expenditures were in Bangladesh. Other important countries were Indonesia and Egypt, although limited to three activities in each country. Total expenditure in these four countries was EUR 120 million.

In countries categorised as 'other' (Yemen, Palestinian Territories, Kenya and Pakistan) one or two activities took place. Eight other activities covered more than one country. These were centrally funded activities, of which the most important were one focused on water retention in the Sahel region (WB and ICRA) and another on support for the IFAD Adaptation for Smallholder Agriculture Programme. It should be noted that the 38 projects shown in Table 3.1 below are those categorised by the review under the 'water management in agriculture' theme. As explained in chapter 2, precise categorisation of the projects in this 11-year portfolio is not possible. A further 23 projects had water productivity as a secondary theme or objective. They mainly focused on (integrated) water management in a broader sense, for example from a river basin or national perspective, but as part of this broader focus an agricultural water management related aspect was included as well – for example an agriculture project within a polder.

Table 3.1 Water management in agriculture: activities and expenditures by country								
Country	Agricultural Development		Water Productivity		Total			
	Number	Expenditures (EUR million)	Number	Expenditures (EUR million)	Number	Expenditures (EUR million)		
Bangladesh	3	52.1	3	3.1	6	55.3		
Indonesia	3	12.3	0	0	3	12.3		
Mali	10	25.9	2	13.1	12	39.0		
Mozambique	0	0	1	1.6	1	1.6		
Egypt	3	13.4	0	0	3	13.4		
Other	2	5.0	3	4.4	5	9.4		
Multiple	4	1.3	4	71.1	8	72.5		
Total	25	110.1	13	93.3	38	203.5		

The majority of the funding shown above, EUR 115.3 million, was disbursed through (co-) funding of projects of multilateral organisations, while the remaining EUR 88.2 million was spent through governments (EUR 54.9 million), NGOS (EUR 23.5 million) and knowledge institutions and consultancy firms (EUR 9.9 million). The largest activity was the Blue Gold project in Bangladesh (EUR 23 million), another activity that reflected increased emphasis on cooperation with the (Dutch) private sector and financed innovative solutions for improving water efficiency in agriculture.

Result chains of those activities with a budget over EUR 1 million were analysed to determine how often the activities and outputs that are part of the reconstructed intervention logic for water management in agriculture shown above, were mentioned.

Figure 3.2 below distinguishes between the 18 activities falling in the 'agricultural development' category and the 11 categorised as 'water productivity' projects. It shows that for most projects (72%) strengthening of water users was mentioned, usually in the form of WUAs to improve farmer cooperation and influence on water management policies. 'Water productivity' projects focused much more on the individual farmer through provision of technology, knowledge and improved farmer skills (82%), while 'agricultural development' projects aimed more at the strengthening of the government institutions (61%) that were

responsible for regulating water management and were often directly responsible for maintaining and managing water infrastructure. The construction and/or rehabilitation of infrastructure was an element of many activities (62%). Some projects in both categories spread well beyond the concept of water management defined in section 1.1 above. Some also supported the improvement of local transport or marketing infrastructure and had more of a general rural development character than focusing solely on water management. Others also worked with land users to optimise soil water management within their fields, promoting agronomic measures for this purpose.

Figure 3.2 Focus of activities within the reconstructed intervention logic water management in agriculture



Physical infrastructure²³ was an important element of both categories of 'water management in agriculture' activity. Of total expenditures, 74% were allocated to projects that used at least part of their budgets for this purpose.

Findings: effectiveness

Findings on effectiveness derived from activities' evaluation reports and country and activity studies are presented below.

Of the 25 water management projects in the 'agricultural development' sub-category (Table 3.1), five are ongoing. Eighteen activities had a budget over EUR 1 million, of which 14 are finished. A final evaluation could only be found for two activities. Four mid-term

²³ Whether an activity includes infrastructure is registered in the MFA MIS using the policy marker 'FysInf', physical infrastructure. In a limited number of cases, this policy marker was not applied correctly. The expenditures reported here for projects with an infrastructure component shown should therefore be seen as indicative. reviews (MTRs) were found. Of the 13 projects in the 'water productivity' sub-category, 11 are ongoing. Of the 11 'water productivity' activities with a budget over EUR 1 million, only one underwent a final evaluation; MTRs could be found for two. Overall, 31% of the expenditures on water management in agriculture are covered by an external mid-term and/ or end of activity evaluation. Project completion reports were also analysed: one or more such reports were found for 11 activities. Of these, eight focused at least partly on infrastructure, which is mostly aimed at irrigation, drainage and flood protection.

The available data show that in general infrastructure was built according to plan, although targets were revised downwards in some projects due to delays and underestimation of costs. When built, reports indicate, the infrastructure was considered of acceptable quality. It was essentially an output, directly within control of the project. Its potential effect on water quantity and quality in agriculture, through protection from flooding and salt water intrusion, improved drainage and increased access to irrigation water, was apparent. However, information on whether this contributed to the availability of water of sufficient quantity and quality for the intended agricultural and livelihood benefits is not clear. First, these variables were not measured directly. Secondly, other factors affected these variables as well.

However, the sustainability of infrastructure through regular maintenance is the main issue. Much of the infrastructure rehabilitated by the projects was built by earlier projects and sometimes rehabilitated earlier as well. The problem was the inability of the responsible government and community institutions to operate and maintain this infrastructure successfully due to insufficient funding, staff and local capacity, a dysfunctional user fee collection system, and sometimes a lack of expertise and will to do so. The problem of 'build, neglect, repair', first mentioned to this review team during the Bangladesh country study, was in fact widespread and afflicted Dutch-funded support for water management infrastructure in many countries. It concerned institutional maintenance (e.g. of WUAs; see below) as well as technical maintenance (e.g. of sluice gates). This evaluation's four country studies give examples of the problem, including PASARC²⁴ and the Office du Niger (OdN) in Mali, extended support to the DNA/DNGRH²⁵ in Mozambique, and the efforts of CSDP, IPSWAM and SSWRSDP²⁶ in Bangladesh. Too often, the response to poor institutional or technical maintenance was to fund a new phase, or a new project, that made further investments to maintain or rehabilitate infrastructure that was earlier built, or rehabilitated, with previous development assistance.

WUAs were formed and/or strengthened in order for them to assume (part of) the responsibility for operation and maintenance of water infrastructure and thereby decrease the burden of O&M for government. WUA formation and initial strengthening through some form of training were often achieved without much difficulty. Also, WUAs were often

- ²⁴ Projet d'Appui al la Sécurité Alimentaire et la Résilience des Populations aux Crises Climatiques et Sociales dans la Région de Mopti.
- ²⁵ National Directorate of Water (Direção Nacional de Aguas); National Directorate of Water Resources Management (Direção Nacional de Gestão de Recursos Hídricos).
- ²⁶ Char Development and Settlement Project; Integrated Planning for Sustainable Water Management; Small-scale Water Resources Sector Development Project.

reported to be enthusiastic and, especially during project support, able and willing to perform small-scale O&M of water infrastructure.

However, after some time, usually after the project ended, the WUAs usually became dormant. There are a variety of reasons for this. Arguably the most important are: (1) a lack of organisational and technical capabilities to do more than simple maintenance, combined with the inability of government institutions to regularly perform more complex maintenance; (2) the uncertain legal status of WUAs, affecting their ability to assume responsibility and/or ownership of infrastructure – which was due to the inability of governments to clearly formulate what was expected of WUAs and provide follow-up support to them. That problem, in turn, is partly explained by the reluctance of political leadership and government institutions to grant a degree of autonomy to WUAs. External political, economic and other factors were still often decisive in water management, reducing the ability of the WUA to influence water management effectively and reducing the incentive to convene and act.

MFA support generally promoted the concept of user payments for agricultural water management and/or supply, but had limited success in this regard. Local WUAs did often institute systems of user fees, without succeeding in achieving high or constant rates of payment. In Bangladesh, for example, not everyone in farming communities joined the local structures that projects established or revived: the Blue Gold project MTR, for example, found that that 63% of households had joined. Moreover, not all who joined paid the fees (without explicit policy on waivers for the very poor). In Indonesia, institutional and regulatory obstacles still confronted efforts to consolidate a system of user fees on irrigated land. In Mozambique, the concept of payments by larger-scale irrigated farmers to the regional water authorities had been introduced, but was not yet institutionalised. In the well-established Office du Niger scheme that the Netherlands had supported for decades in Mali, most but not all farmers did pay water fees to the OdN, although it is not clear whether those who did not were smaller or larger producers or whether fees received covered the costs of water provision; and there were accusations of mismanagement of this fee revenue by the OdN. In Egypt, the sustainability of the irrigation schemes covered by the IIIMP remained uncertain since the collection of fees did not meet its targets and therefore cost recovery could not be realised (Euroconsult Mott MacDonald et al., 2014).

These projects thus faced, and did not fully meet, a dual challenge: physical maintenance and institutional maintenance. Institutional maintenance means the long-term provision of advisory, facilitation and (re)training services to local structures like WUAs – particularly important because experienced office holders and staff may leave and be replaced by people without the necessary skills and insights. Like pumps and canals, water management institutions cannot simply be installed by a project and then expected to function without any further attention. A further dimension of challenge, and of opportunity, concerns the multiplication of roles for WUAs, which may engage in, or support, local income generation, savings and economic development activities. WUAs were challenged by this growing number of roles. Elsewhere, such economic activities strengthened the legitimacy and attractiveness of these local institutions from the community perspective. In some cases, the economic roles may have been more important, from that perspective, than water management itself.

Dutch policy faced a different challenge in Mali: achieving effective results through a large-scale irrigation organisation, the Office du Niger (OdN), which the Netherlands had supported for three decades. Some of this support, before the review period, was effective in achieving production increases and empowering the peasant producers within the zone of the OdN. But this major WMAg programme had lost much of its practical effectiveness by the end of the period, with substantial investments in the OdN's institutional development yielding comparatively little. According to informants, irrigated production in the OdN, both current and potential, was beset by ongoing questions of viability; and the efficiency of agricultural water use remained far from optimal. More recent Dutch-supported initiatives to enhance water management in Mali agriculture were achieving positive short-term results within a broader approach to promoting sustainable livelihoods. The sustainability of these results remains to be seen.

Some interventions covered by this review focused on water productivity in the technical sense: the efficiency of water use in agriculture, or the so-called 'crop per drop' issue. Their effectiveness varied, and detailed data on whether and how much they reduced water use per unit of production are generally lacking. Two mid-term evaluations could be traced.

One MTR concerned the **IFAD Adaptation for Smallholder Agriculture Programme** (ASAP, 2012-2016). This multi-country activity (ten countries, with a EUR 40 million contribution from the MFA) was officially focused on water use efficiency but had a broader remit to support climate resilience. Its goal was to improve the climate resilience of 8 million farmers by 2020, through mainstreaming climate change into IFAD's existing work on rural development with poor smallholders. Disbursement only stood at 6% in July 2015, due to the programme's operation as a grant-based trust fund, making its management complex. The 2015 MTR reported that ASAP-funded activities had been very successful in mainstreaming internal decision and approval processes to ensure that new projects consider climate change implications, choosing relevant projects from the portfolio for ASAP-supported investment. ASAP-funded communications activities had also been successful in raising external awareness in international development circles on issues relating to smallholders and climate change (ODI 2015, pp. 4-5).

The other water efficiency project for which an MTR is available, a **Water Grand Challenge: Securing Water for Food** (SWFF), financed innovative solutions aimed at increasing water efficiency in agriculture. Although it is too early to report effects, early indications were that the project was able to attract and finance promising solutions, although there were concerns over the lack of representation of southern countries, both among the applicants for finance and also in the selection process of proposals (Björklund et al., 2016, p. 4). While some of the projects, including those in the inland delta of the Niger in Mali, showed positive short-term results, work in that country and elsewhere highlighted one important point. Simply increasing the amount of water available on farmers' fields (usually by irrigation) is not necessarily the best way to increase agricultural productivity, and may have negative environmental effects. It is definitely not the simple solution. Every effort must be made to maximise the efficiency with which irrigation water is used; and, in some cases, better management of soil moisture, structure and fertility in rainfed agriculture may be a more appropriate strategy than increasing the area under irrigation.

Analysis of project design by this review suggests that insufficient reference was made to previous experience. Mostly, the same strategies were used to form and strengthen WUAs without properly dealing with the issues described above, which were based not only on reports from earlier projects but also on a wider literature study (Hepworth et al., 2013). Also, at least four projects in Bangladesh involved in WUA strengthening all developed their own guidelines for this process without consultation, also due to a lack of coordination by the government. The complexity of integrating a farmer-led organisation in existing government structures was often underestimated in project strategies. Therefore, it was unlikely that rehabilitated infrastructure would be maintained by WUAs as expected. This is clearly a matter of governance and institutional maintenance. Available reports indicate that costs of preventive/routine maintenance of infrastructure were very reasonable compared to average farmer incomes, and most tasks required only limited funds and relied on in-kind labour that users could provide. Indeed, anecdotal evidence shows some success stories of WUAs that were able to continue O&M after project support. Whenever WUAs actually implemented or oversaw work done (usually in a project environment) on their infrastructure, the experiences were generally positive because they were cheaper and, most importantly, more motivated to ensure the quality of the work.

Up to its MTR in 2016 (Van Woersem et al., 2016), the **Sustainable Water Fund** (see also section 3.5) funded five projects, out of a total 23, that focused on water management in agriculture. All concerned irrigation. Of these five projects, two were included in the MTR, which said that they had clear business cases and models and strong partners, both public and private. The additionality of the Dutch technical contribution to these consortiums was less clear, however.

Reports on a limited number of completed projects that supported more than merely water management in agriculture show that the broader focus of these projects also delivered a wider array of results, ranging from improving land titles and capacity building at national water institutions to enhancing access to social services. However, results with respect to water management showed the same pattern. The construction and rehabilitation of water infrastructure rendered benefits in the short term, due to reduced exposure to flooding and waterlogging and improved functioning of irrigation schemes. But, due to the factors mentioned earlier, the sustainability of these investments was often limited.

Findings: efficiency

Overall, the costs and duration of achieving key results in water management for agriculture deviated from what was planned. Time and cost overruns were common, leading to project extensions – some budget neutral and some with additional funding, signalling unrealistic planning in many cases, even more so in cases of continued 'build, neglect, repair' cycles. The quality of outputs was generally satisfactory; their contribution to outcomes was mixed, and the sustainability of results for water users was in most cases doubtful because of challenges at all levels of the institutional framework for agricultural water management in partner countries.

MDBs often attempted to assess projects' efficiency in terms of their internal rates of return. The ADB's assessment of the Participatory Irrigation Support Project (PISP) in Indonesia reached a positive conclusion in this regard – at least in terms of its immediate outcomes and outputs. The World Bank, on the other hand, rated the efficiency of the Water Resources and Irrigation Programme (WISMP) also in Indonesia, as only 'modest'. IOB's own impact evaluation could not find any overall significant effect on productivity and thus could not confirm the ADB's assessment (Schenk and Heun, 2017).

For the preparation and implementation of water management in agriculture, as for the other activities in this 11-year portfolio, the quality of monitoring, reporting and evaluation was an important dimension of efficiency. Monitoring and evaluation (M&E) of water management projects in agriculture mostly related to construction and management of irrigation (and sometimes drainage) infrastructure, almost exclusively limited to the measurement of outputs. Only one project attempted to measure use of infrastructure and/ or functioning of WUAs. In some projects, an attempt was made to measure changes in agricultural production. However, without an explanation of the causal pathways that might have led to increased production, the credibility of this evidence is low. This was compounded by the use of regional or national statistics on production that did not distinguish between project interventions. Therefore, although changes in production were often reported, almost none of these reports presented credible evidence of project effectiveness. The attribution of change to project interventions is a statistically demanding process requiring data that are usually not available.

In some cases, data on water availability was available at irrigation scheme level and could be used as a rough measure of water productivity under some assumptions. This strategy was not pursued by projects' M&E efforts, however. Another option was the use of satellite remote sensing data to measure crop evapotranspiration on a local scale, even at plot level. One project in Egypt produced a report on changes in water productivity based on remote sensing data, which provided valuable information on its impact through measurement of crop evapotranspiration (Abdulhamid et al., 2012). A project approved in 2015 financed the development of a remote sensing database in collaboration with FAO and UNESCO-IHE, to produce and provide this kind of information more systematically.

3.2 (Sub) national water management

Introduction

The concept of preparing and implementing water management plans was central to MFA policy throughout the review period. This support was at either national or sub-national level: a delta, river basin or other defined area. Initially the focus was on national IWRM plans. The policy letter of 2012 went into more detail, specifically mentioning improved watershed management and safe deltas. It stated that, in at least eight watershed areas and deltas (in Bangladesh, Benin, Ghana, Indonesia, Kenya, Mali, Mozambique and Vietnam) and ten cities, support was to be provided to the development of plans for sustainable growth and water security; and implementation of these plans was to start. The results framework (2016) set a target of 3 million people experiencing the advantages of improved watershed management and safe deltas by 2017, increasing to 20 million by 2020.

This section addresses the evaluation questions on policy effectiveness and efficiency for (sub) national water management, as shown in the box below.

Evaluation questions

Effectiveness

- 8. Did MFA support contribute to approved water management plans?
- 9. Did the supported water management plans include principles of integrated development and management of water, stakeholder participation and transparency of processes, equitable development without compromising vital ecosystems?
- 10. Did MFA support contribute to strengthening of the enabling (political, institutional, information, water infrastructure and O&M) environment for actual implementation of the plans?
- 11. Were budgets for implementation of water management plans allocated and are plans implemented?

Efficiency

19. Was policy implementation adequately operationalised in support of achieving intended key results, with reference to both water management planning and implementation results?

Summary: effectiveness

MFA support contributed to many water management plans, at various scales, in several countries. Most were approved. In some cases this was a simple process: production of a plan, followed by its approval. In other cases, the planning process was longer, sometimes broken into stages, sometimes complicated by political or institutional factors. Focused planning for tangible infrastructure projects was generally more productive than diffuse (sector) support for a partner government's overall water management planning capacity and effort (as in Mozambique) – although the complexity and sensitivity of the Jakarta planning effort slowed the emergence of clear and approved proposals there. This review also found that, in larger-scale planning particularly, it is simplistic to think of two separate stages – planning followed by implementation. In practice, the two are likely to overlap. Planning is part of the adaptive management of uncertainty, which is what water management is about.

The answer to the second evaluation question is also largely affirmative. IWRM principles were respected and promoted, including principles of stakeholder participation (although this was not always optimally thorough) and of minimising environmental impact while aiming for environmental sustainability (which has not yet been done adequately for the catchment from which Jakarta's 13 rivers flow).

To answer the third question: water management planning and implementation activities made various useful contributions to the enabling environment. But the biggest lesson in this regard from these 11 years of work is that there are limits to what external support can achieve. The ultimate viability and sustainability of major changes in resource management practice depend on partner countries and their national and local institutions: these sovereign states do, after all, have ownership of their own policies and institutional arrangements. The will and the effort to make the required changes must, in the final analysis, come from within. The effectiveness of the larger-scale planning contributions in Bangladesh, Mali and Mozambique, for example, depends on domestic governance factors that, up to the end of the review period, were not favourable. Thus, the policy assumption that integrated water plans lead to meaningful, effective action cannot always be affirmed. Recognising the ownership of their partner governments, donors should recognise that this is beyond their control.

The policy assumption that it is socially and institutionally feasible to achieve significant improvements in the quality of water management institutions must also be treated with caution, particularly from a longer-term perspective. This is because of the incomplete accuracy of another assumption: that there is political will at the various necessary levels for Netherlands-supported policy and institutional initiatives to be converted into meaningful action. While political will was noticeable in some cases, such as Beira and (for a time) Jakarta, it was less evident in Bangladesh and in Mali. In this last case, there were, understandably, higher priorities. Overall, however, the review found that water resource management, and the required institutional and budgetary support for it, did not get the high political priority they needed.

Consequently, the review must offer a mixed answer to the fourth of the evaluation questions: whether budgets for the implementation of water management plans were allocated, and whether the plans were implemented. Overall, the adequacy of budgeting and of implementation were partial. Again, it is important to consider implementation in the longer as well as the shorter term. Some projects, notably those focusing on smaller-scale planning, also supported the implementation of the plans. The bigger challenge was the longer-term continuation of that implementation after project termination. In some cases, another cycle of 'build, neglect, repair' could not be ruled out. In other cases, of course, implementation still lies in the future, and will almost certainly be accompanied by further planning as part of the adaptive management process.

Summary: efficiency

The basic issue was whether the 'key results' were at output or outcome level, short- or longer-term. The technical side of planning processes for major infrastructure was generally efficient – within time and budget, unless delayed by exogenous factors. In some cases too, such as Jakarta, the intended results had to be revised as the planning effort continued, complicating any assessment of value for money.

Description of thematic area

Intervention logic

The reconstructed graphic depiction shown below (Figure 3.3) presents the broad objectives of MFA policy for support to (sub) national water management, as well as the objectives of the more narrowly defined efforts to enhance the efficiency and productivity of agricultural water use. The graphic also shows the causal pathways along which interventions were meant to lead to the intended results.



Figure 3.3 Reconstructed intervention logic (sub) national water management

According to this logic, the plans were (co-) financed by the MFA and prepared with the assistance of service providers, typically funded by the MFA and reporting to the relevant government authorities in the receiving country, which should take the lead in driving the required process of change. Whether a water management plan fully adhered to the IWRM concept or not, it should at least be the result of an inclusive and transparent process to ensure that the plan reflected the needs of relevant stakeholders and was therefore broadly accepted. Implementation of the plan should improve the institutional setting for sustainable water management, with clearly defined roles and responsibilities combined with an increase in capacity. With the plans drafted and institutions strengthened, decision-making should be well informed and equitable and infrastructure should be (put) in place for the implementation of decisions. Together, this should lead to improved protection from water related problems; fewer water user conflicts; improved ecosystem quality; and capacity to include and implement climate change adaptation and inclusive socio-economic development measures.

Activities

The evaluation categorised 80 activities under the theme of national or sub national water management. Of these, 25 focused on water management planning. The other 55 focused on plan implementation, for improved river basin, coastal zone and disaster management. Table 3.2 distinguishes these activities by country. The countries named are the four selected
for case study and others with a significant level of expenditure. Most activities took place in Bangladesh, the country with the highest expenditure. More than half of the Bangladesh funding was allocated to several phases of the Char Development and Settlement Project (CDSP). Other important countries were Indonesia and South Sudan, where most activities focused on implementation, for example the Aceh Nias Sea Defence project in Indonesia and Water for Lakes State in South Sudan. Also striking is the high expenditure on dike construction in Suriname. For this theme, only four activities were funded from the central budget. The most important of these were the RVO-administered programme 'Disaster Risk Reduction' and the contribution to the PvW activity supporting the development of a national water strategy for Myanmar.

Table 3.2 (Sub) national water management: activities and expenditures by country							
Country	Planning	Expenditures (EUR million)	Implementation	Expenditures (EUR million)	Total	Total expenditures (EUR million)	
Bangladesh	7	27.1	11	45.8	18	72.9	
Mali	0	-	3	1.1	3	1.1	
Indonesia	1	2.0	11	30.3	12	32.3	
Mozambique	3	7.0	3	5.2	6	12.2	
South Sudan	0	-	3	21.2	3	21.2	
Suriname	0	-	1	26.0	1	26.0	
Other	12	31.8	20	62.6	32	94.4	
Multiple	2	5.0	3	7.8	5	12.8	
Total	17	72.8	55	200.2	80	273.0	

Within the total expenditure of EUR 273 million shown above, EUR 102.7 million was disbursed on the (river) basin management sub category of 'implementation'; followed by EUR 72.8 million on (sub) national water management planning. Disbursements on the coastal development sub category of 'implementation' totalled EUR 66.2 million, while those on disaster management totalled EUR 31.3 million.

Support to national water management planning was provided in Benin, Bangladesh, Mozambique and Bolivia, funded through an NGO (Benin), the recipient government (Bangladesh, Mozambique and Bolivia) and a multilateral organisation (Bangladesh). In about half of the activities climate adaptation/mitigation objectives were incorporated.

As for the other distinguished thematic areas, the result chains of the 59 projects with a budget over EUR 1 million were reviewed to establish how often specific result areas in the reconstructed intervention logic for (sub) national water management presented above were mentioned. Figure 3.4 below makes a distinction between the 17 planning and the 42 implementation activities with a budget over EUR 1 million. Clearly, the strengthening of (government) institutions occurred most often. Also, logically, drafting of water

management plans was common among planning activities, but also in activities with an implementation focus. The collection or sharing of information was mentioned for 36% of the activities.



Findings: effectiveness

Findings on effectiveness derived from the country and activity studies and activities' evaluation reports are presented below.

The main thrust of Netherlands support in **Bangladesh** between 2006 and 2016 was at the local level, directly addressing the needs of the rural poor through water, land and agrarian development. These efforts were designed and delivered through local water management plans that, in some projects, linked into broader agrarian, rural development and/or community development planning. In the latter part of the review period, in consultation with the Government of Bangladesh, a stronger Dutch emphasis on delta planning emerged. This was meant to facilitate climate-resilient strategies for sustainable development in the country. It also served as a platform for Bangladesh-Netherlands partnerships, intended to offer opportunities and potential commercial profit to a wider range of Dutch stakeholders. Some local planning approaches were focused on enhanced

planning by local user groups of drainage and related agricultural water management; others had a broader remit to plan the development of new areas, based on integrated coastal zone management approaches. The largest project, Blue Gold, continued in the earlier local planning tradition with the development of Polder Development Plans in partnership with user groups – often reviving groups and improving on plans developed by earlier projects. However, with its primary focus on water management for agricultural development, Blue Gold was categorised by this evaluation as 'water management in agriculture' (section 3.1 above).

At this local level, during project implementation periods, the water management plans developed with Dutch support in Bangladesh were implemented, significantly enhancing – although they could never completely assure – water safety and water security. The challenge, linked to that of institutional maintenance, was of sustaining the implementation of these plans beyond the period of project presence. The fact that successive projects often had to revisit the work done by earlier projects (or support O&M in the areas of previous phases while moving on to new areas) suggests that the longer-term viability of local water management plans was poor. This was not necessarily due to poor planning. It arose from the broader challenges of institutional sustainability at national as well as local levels, linked to the lack of adequate recurrent funding for maintenance.

At national level, the Bangladesh Delta Plan (BDP) 2100 was another prominent case of Dutch support to a major water management planning exercise – intended, of course, to lead to implementation. Like planning for Jakarta flood management in Indonesia, and the Beira Master Plan in Mozambique, this initiative was in line with the emerging Dutch emphasis on a 'delta approach' and on 'delta countries', although it was broader than the apparent focus on 'urban deltas' that emerged from the International Water Ambition. Dutch support led to the competent implementation of this major planning exercise in Bangladesh, although arrangements for government to appoint a team of consultants to work alongside the partly internationally recruited consulting team did not work out as planned, and local and international opinion were not unanimous on some technical and strategic aspects of the plan. In 2015 the Government of Bangladesh incorporated the BDP in its Seventh Five-Year Development Plan, although implementation of the BDP had not begun at the end of the review period (GON, 2015).

The Netherlands made a major contribution in **Indonesia** to the application of IWRM principles at basin or regional scale during the review period. The effectiveness of these efforts varied. Despite the huge importance for Indonesia and the planet of enhancing the management of the country's lowland and peatland resources, and the acknowledged expertise of Dutch specialists in this field, progress was difficult and MFA support was terminated (although Dutch firms continued to work in those zones for commercial clients). Useful progress was made in support for irrigation management planning at the meso scale by WISMP, although the World Bank rated the project's performance in enhancing water sector governance and strengthening sector fiscal sustainability, nationally and in project basins, as 'modest'. More explicit support for IWRM came through Dutch assistance to basin planning activities and related institutional development. Like many

other countries, Indonesia struggled to muster the resources and the political will to make this extra administrative layer of river basin organisations effective. Emphasising the fact that domestic factors are often more important than external assistance in strengthening water management planning were the problems that arose when Indonesia's new Water Law of 2004 was overturned by the Constitutional Court in 2015.

The most prominent Dutch-supported water management planning exercise in Indonesia undertook successive phases of work to tackle the flooding problems of the capital, Jakarta. These were local in geographic scale – in one sense, too local – but also of national significance, as well as being an international example of planning for potentially massive investment in huge infrastructure works. Again, domestic political, governance and economic factors made the setting and the progress of this planning work more challenging and uneven. There was a long and complex saga of planning for and debate about a series of infrastructural developments that would, in theory, protect the steadily subsiding areas of north Jakarta from flooding by rivers and the sea and could, according to proposals that some informants considered far too optimistic, include major, private sector-funded land reclamation works - potentially the 'Great Garuda', in the shape of Indonesia's national symbol - and an outer sea wall. The trend in this long process was described by one informant as 'defence to development'. The planning paradigm evolved from a focus on defending Jakarta from flooding threats by installing the necessary infrastructure to a concept of attracting private sector funding through massive new land and property development that could, some planners believed, finance the infrastructure costs and avert politically sensitive high state investment in the capital city.

Jakarta showed that water management planning at this scale is not only highly political, but also concerns investment planning as well as technical planning. From the latter perspective, one critique was that, despite all the work done, an integrated approach to the whole catchment at whose foot Jakarta lies had not been achieved. From this perspective, three stages of awareness, planning and action were required, involving the national and city authorities as well as various development partners. These complexities affected the ways in which Dutch contributions could be made and the extent to which those contributions could achieve their intended results. The first stage was infrastructure to contain the rising water levels that were already flooding north Jakarta periodically. The second was to accept that the rapid subsidence of the area was gravely exacerbating the threats, and that the most urgent and effective action would be to expand municipal drinking water supplies so that groundwater extraction and the associated subsidence would slow. Action on this had not yet been taken at scale by the end of the review period. The third, as mentioned, was to understand that Jakarta water management planning was bound to be incomplete and only partially effective if it was not integrated with planning for the whole basin above and behind the city. Again, despite useful technical studies, this had not happened by the end of 2016. Jakarta was a prime showpiece for the Netherlands' International Water Ambition, demonstrating the expertise of Dutch planners (much appreciated by their Indonesian hosts) as well, again, as the limits to what external support can achieve in complex local settings. It demonstrated also that water management

planning at this scale must be iterative and incremental. It requires long-term commitment. There is no point in expecting quick results.

Indonesia provided an important instance of Dutch efforts to offer their own planning and management paradigms in a very different national and local setting. A Dutch water authority played a central role, working with the residents of a low income, frequently flooded area in the city of Semarang to plan and develop a polder system to drain and protect the area from further inundation. The planning and related policy and institutional development took a decade, but by the end of the review period the concept of a separate water management authority had been accepted and put in place; the polder was dry; and the principle of residents paying a water management levy to this new authority appeared to have been accepted – but had not yet been implemented. Experience in various countries offered repeated reminders that Dutch water authority concepts and approaches cannot just be exported, and that water authorities' expertise was not necessarily applicable elsewhere. But Semarang was a case in which this sharing of planning approaches, and joint learning about what would work, yielded positive results.

In **Mozambique**, the Netherlands adopted two very different approaches to supporting water management planning and implementation. The first, earlier and much larger-scale approach was that of sector budget support, through which substantial funding was transferred to the National Directorate for Water to assist it in its various functions. These efforts were linked to long-running institutional development support. In 2012, the modality of sector budget support was abandoned because it was difficult to demonstrate clear results. A shift was made to programmatic support to the National Directorate, with clearly defined milestones and outputs (the ASAS²⁷ V project) – which included the preparation and implementation of water management plans in association with, and increasingly through, some of the regional water authorities. But, by the end of the review period, this mode of assistance had been partially suspended due to concerns about governance and due process. The 2016 MTR of ASAS V found that planned outputs were too ambitious and that the National Directorate remained weak (Act-for-Performance, 2016). Some of the regional authorities were becoming more effective, however, through direct support.

The second approach to water management planning showed more promise. Constructive Dutch management of the available funding and technical assistance modalities combined with strong leadership and a sense of urgency about water management challenges in Beira to drive the preparation of a master plan for the port city in 2013, with follow up activities in 2014-2015. These activities were funded by PvW, not MFA, but directed by the MFA in The Hague in consultation with the Netherlands Embassy in Maputo, whose delegated budget allocated EUR 1.5 million for implementation of the plan between 2016 and 2021 (in addition to EUR 1.5 million provided by PvW). As in Jakarta, there were significant issues around investment finance and political backing for the project – but, again as in Jakarta, entrepreneurial management by key Dutch stakeholders exploited the available instruments to build a strong foundation for implementation – some of which was under way by the end

²⁷ Sector Support to the Water Sector (Apoio Sectorial para Água e Saneamento).

of the review period. This second approach in Mozambique was partly a consequence of the first. After a long period of unconvincing performance through sector budget support until 2012, and the disappointing results of the programmatic support – much of it focused on institutional development – the EKN concluded that it should shift more of its funding emphasis back to tangible, infrastructural support. This led to its support for the Beira planning process and its subsequent allocation of funds for implementation of the plan, as well as direct support to two of the regional water authorities.

Another case of GON cooperation in 'delta' planning for water management and climate change adaptation, although not funded by the MFA, was the contribution of a PvW-funded consortium to the Vietnam Mekong Delta Plan. The contribution is mentioned briefly here as the Water for Development policy letter of 2012 mentions both Vietnam and the Mekong as focus areas. Section 3.3 reports on a transboundary Flood Management and Mitigation project supported by MFA earlier during the review period, in which Dutch parties were involved that also took part in the preparation of the Mekong Delta Plan. The EKN in Hanoi reported that the support to delta planning had been pursued from a comprehensive IWRM perspective, looking at the delta as a whole. It was stated to have provided the main directions, and recommendations, for the upstream, mid-stream and coastal zones. The EKN further reported that the government had expected a different, more concrete type of plan, with an implementation agenda and funding. However, the contribution was reported to have become increasingly appreciated by government and donors alike as a key reference for future planning (EKN Hanoi, PPT presentation 2017). Dutch government funding was stated to be used for the Dutch water sector to be visible, to help realise IWRM-inspired transformation processes and to support the solution of urgent water problems in this middle-income country. In Vietnam, as in Indonesia, the Dutch water sector had to compete or collaborate with stakeholders from other major donor countries (e.g. Korea and Japan), which remained involved for geopolitical as well as commercial reasons, sometimes providing large-scale (subsidised) funding from their investment banks.

The Egypt National Water Resources Plan Coordination Project (2009-2013) fell within the early years of the review period and their policy focus on IWRM plans. The Egypt National Water Resources Plan (NWRP) was developed within the framework of the NWRP project carried out by the Ministry of Water Resources and Irrigation (MWRI), with support from the Netherlands. Dutch water management policy (IWRM) was reported to be clear and understood and also taken up by other donors such as the World Bank Country Office. The plan and platform provided instruments for a joint integrated sector approach supported by interested donors, such as the EU, KfW and the World Bank. The NWRP Coordination Project was reported to have been successful in achieving its objectives: the creation of a receptive and supportive environment; enhancement of the capacity of national and governorate level WRP units; enhancement of planning procedures; and monitoring and assessment of impact. (Mott MacDonald, 2013, pp. 8-10). The main challenges for the near future were to mainstream the NWRP concepts and mechanisms in the institutional framework of the Government of Egypt and to prepare for the next strategic plan. Several controversial water management issues, such as water allocation approaches and horizontal expansion in the light of water resource constraints, were raised, but nevertheless in most cases consensus

was not reached (Mott MacDonald, 2013, p. 8). The project was followed up by an EU project that continued the same approach. Expert informants reported that the results remained questionable. The links between the Plan, sector plans and budget allocations were still weak, funding was still limited, large parts of the envisaged plan were lacking and implementation was substantially delayed. Politicians continued to be reluctant to approve the proposed legal framework formalising stakeholder participation through local WUAs. Since completion of the project and the subsequent political transition in Egypt, major budget deficits arose and priorities changed, which negatively affected political support and NWRP implementation. The broad lesson about IWRM, again, was one of insufficient political priority and institutional coordination.

Early in the review period, the Global Water Partnership (GWP) Programme for National IWRM and water efficiency plans in six countries (2002-2011) was a centrally funded initiative reflecting the policy focus on IWRM plans. In addition to GWP core funding, MFA funded a project of the GWP in support of IWRM plans and water efficiency for six countries in Africa (Benin, Cameroon, Cape Verde, Eritrea, Mozambique and Swaziland). Initially this was for the period 2005-2007 (budget EUR 6.4 million, expenditures EUR 3.9 million over the review period). Later the project was extended twice, up to 2011, to allow time to achieve results. The project completion report (GWP, 2010) stated that the project was successful, having contributed to national IWRM planning for four of the six countries, based on a locally driven participatory approach involving different sectors, and to integration of IWRM in National Development Plans and/or Poverty Reduction Strategy papers. Some additional financing was secured, institutional roles were better defined and coordination was strengthened. Two reports on self-evaluation conducted by the GWP chapters for Benin and Cameroon stated that to a greater (Benin) or lesser (Cameroon) extent, stakeholder consultations had taken place, training had been provided, studies were done and steps taken towards putting policies and plans in place. But there was less than expected progress in follow up and implementation by the governments concerned (GWP Benin Partnership, 2010, p. v; GWP Cameroon Partnership, p. iii).

The project was reported to have helped in developing enabling regulations, policies and legislation to improve water governance. Conditions were put in place for possible future development outcomes. The programme faced some delays in uptake as some countries needed time to adjust to work in stakeholder partnership mode and to provide cross sector linkages. Reported issues include the over-politicisation of administrations, impeding the neutrality and impartiality that should have characterised the activities (GWP Benin Partnership 2010, p. 15); and the low priority given to water management in government budgets (GWP Cameroon Partnership, 2010, p. iv). Continuation of the project role as supporter and facilitator of the intended change process was not provided for. The GWP 2013 external review report (Rambol, 2013) pointed to a GWP survey showing that by 2013, many countries had adopted IWRM principles in national policies, either pending approval (including Benin, Cameroon, Cape Verde, Swaziland) or approved (Eritrea, Mozambique). The contribution of the GWP IWRM programme to knowledge and awareness, and to some unknown extent to the uptake of IWRM policy, was assessed to be plausible. However, IWRM budget allocation and implementation remained inadequate across the countries.

The country and activity studies found in general that IWRM had become part of government policy and plans but that efforts to make IWRM principles a practical part of water management implementation were still limited. Making IWRM an operational reality is a political, institutional and management challenge. However well decision makers may recognise the logic of IWRM, they often have higher political priorities. Institutions still plan and deliver more along sectoral lines than in the fully integrated manner that IWRM demands. IWRM poses significant coordination and management challenges across ministries, agencies and local government structures, and the institutions that ought to facilitate this – such as Indonesia's river basin organisations and Mozambique's regional water authorities – still lack the capacity and the political authority to do so.

The RVO-administered **Dutch Risk Reduction Team** facility (DRRT) was set up in 2013 to strengthen the flexible engagement of the Dutch water sector in the prevention of, and reconstruction after, water-related calamities and structural water problems: to reduce humanitarian damage, achieve positive economic impact and position Dutch actors appropriately at an early stage (Krijnen and Heun, 2016, p. 1). With a budget of EUR 2.5 million, the main instruments were DRRT missions that took place in 25 countries, ranging from developing to developed economies. An MTR of the DRRT found that Dutch parties as well as the recipient(s) appreciated the DRR as an instrument with commendable standards. However, the ToR of the missions were found to in general be too ambitious. The DRRT's effectiveness in solving water problems was assessed as modest (limited scale missions, good advice given, further studies/detailing advice required, the link to implementation required more follow up: Krijnen and Heun, 2016, p. 5).

Findings: efficiency

A wide range of activities are categorised in this study as support to the preparation and implementation of (sub) national water management plans. Some, like IPSWAM and SWAIWRPMP²⁸ in Bangladesh, combined both planning and implementation of integrated water management with a broad range of rural development functions. Others, like the PvW-funded Beira master plan and the sequence of planning work for Jakarta, were more focused, localised planning exercises – but proposing major investments and large-scale infrastructure.

What can be said is that the planning processes themselves were generally conducted with acceptable levels of efficiency. The more complex the institutional and political setting, the more adaptive management was needed during the planning period – leading, in the case of Jakarta, to a series of projects with delegated MFA funding, combined with PvW commissions. Once contracted, the Beira master plan was produced in less than a year. Arrangements and planning performance were more difficult in Jakarta and for the BDP

²⁸ The South West Area Integrated Water Resources Planning and Management Project has been categorised as an activity in Water Management in Agriculture. But, as is shown in Figure 2.1, overlap with other activities is possible, as in this case with (sub) national water management.

2100, with the terms of reference for Jakarta planning evolving over time and difficulties in arranging the counterpart team – as well as the general challenges of planning within and for the Bangladesh government system – slowing BDP 2100 preparation somewhat. Planning for the Indonesian peat/lowlands following the Mega Rice Project was halted for political and governance reasons, not technical ones. Overall, Dutch expertise convincingly demonstrated its quality in these planning processes. Government clients were satisfied. Cooperation was generally cordial and constructive.

The more significant finding, however, concerns the nature of water management planning and how the efficiency of the process should therefore be perceived. The BDP 2100 demonstrated the importance of the relationship between planning and implementation for such major exercises. There was a feeling in some quarters in Dhaka that inefficiencies had arisen, and the BDP process had been unsatisfactory, because full-scale implementation could not immediately be launched on the basis of the planning documentation completed by the end of 2015. As Jakarta also showed, it is wrong to think of a simple, two-part process: planning, then implementation. In practice, planning on this scale must be iterative. Implementation must be adaptive. The compendious BDP 2100 document was the end of the beginning. What lay ahead was the continuation, deepening and adaptive specification of the ideas set out so far: what one informant described as the on-going management of uncertainty. In fact, efficient water management planning is an iterative process that blends into the on-going work of implementation.

Efficiency became questionable in the longer term, when it became apparent that new projects, or further phases of old ones, were devoting at least some of their resources to rebuilding infrastructure and institutions in which earlier projects or phases had already invested. In other words, efficiency was poorer at outcome and impact level. There was too much tolerance of the 'build-neglect-repair' cycle.

For the preparation and implementation of water management plans, as for the other activities in this 11-year portfolio, the quality of monitoring, reporting and evaluation is an important dimension of efficiency. Section 2.3 above showed the unsatisfactory proportions of completed activities funded centrally and through delegated budgets that underwent an evaluation. Broader assessments of performance, like the current study, are significantly constrained by the level of evaluative attention that was given to these activities. Evolving modalities for planning and implementation, increasingly blending MFA and other funding and making more use of relatively short-term inputs, notably from PvW, further diminished the efficiency with which the overall portfolio was managed, because the now more fragmented effort was harder to monitor and evaluate systematically.

3.3 Transboundary water management

Introduction

The MFA supported transboundary water management through (co-)funded multilateral and bilateral programmes and projects. The 2012 policy letter Water for Development stated the ambition that by 2015 a contribution would have been made to cross border negotiation and joint watershed management in at least seven cross border watershed areas: the Brahmaputra, Incomati, Nile, Mekong, Senegal, West Bank Aquifer and Zambezi (MFA, 2012, p. 9). A consideration in the selection of these areas was their importance for Dutch bilateral development cooperation partner countries that have serious water problems.

This section addresses the following evaluation questions on policy effectiveness and efficiency.

Evaluation questions

Effectiveness

- 12. Did MFA support contribute to strengthened institutional arrangements and formal agreements over trans-boundary water sharing, allocation and management between countries; do these take into account global norms for international water streams?
- 13. Did MFA support contribute to a strengthened enabling (political, institutional, water infrastructure development and O&M) environment for actual implementation of arrangements and agreements?
- 14. Did governments of riparian countries allocate budgets and/ or take other measures to follow up and sustain arrangements and implementation of agreements, including joint monitoring?

Efficiency

19. Was policy implementation adequately operationalised in support of achievement of intended key results, with reference to institutional arrangements and formal agreements?

Summary: effectiveness

MFA support made a modest contribution to strengthened institutional arrangements and formal agreements over transboundary water sharing, allocation and management between countries. Three categories of motivation for TWM can be distinguished: maximum use of the common good, e.g. for irrigation or power generation; conflict prevention; and maintaining ecological sustainability (Swedish Water House, 2012, p. 3). The study just

quoted found the first category to be dominant, as it is in the portfolio of activities reviewed here – although in several of the Dutch-funded efforts the 'common good' was mainly the protection of downstream people against floods and the promotion of their economic and environmental interests. Progress in Dutch-funded TWM was never easy. There were multiple political and institutional obstacles, sometimes compounded by insufficient understanding of local complexities and sensitivities. Support to TWM is a long-term undertaking, and – if things go reasonably well – formal intergovernmental outcomes may only emerge after a decade or more. In all such processes, the differential interests of upstream and downstream riparian states are significant. Countries like Bangladesh and Mozambique typically need TWM action more urgently than their upstream neighbours, but rarely succeed quickly with diplomatic efforts to achieve it – even if their own governments give it the required political priority. The policy assumption that the necessary political will would be applied did not often prove fully accurate.

As in many other fields of water resource management, it was easier in TWM to achieve technical outputs than environmental and institutional outcomes. The related policy assumption that TWM is politically and institutionally feasible was, at best, simplistic. At both levels, Dutch support did appear to promote adherence to global norms for international watercourses, although there is little systematic reporting on this requirement.

By the same token, MFA only made a partial contribution to a strengthened enabling environment for the implementation of TWM arrangements and agreements. The political environment was rarely fully stable or fully conducive to progress, and not all projects intervened at the Track 1 level²⁹ of diplomacy required to achieve it. Developing TWM institutions means combating the suffocating pressure of intergovernmental diplomatic bureaucracy, which often puts the form of cooperation and dialogue ahead of the substance of joint action. Again, therefore, rapid progress was unlikely; and projects that expected it were soon shown to have been unrealistic. The actual implementation of arrangements and agreements therefore took time to start, if it started at all; and its sustainability, which depended on the relevant government institutions, was uneven. In some cases, monitoring procedures were not adequately continued after TWM project termination, and infrastructure was not fully maintained. The review found that governments' budgetary and other arrangements to sustain and implement TWM agreements were often inadequate.

Summary: efficiency

Based on what information is available, the review's findings show a mixed picture in this regard. While some activities were able to perform efficiently, particularly at output level, others experienced significant cost and schedule overruns, for the reasons outlined above.

²⁹ Track 1 diplomacy involves official discussions between governments and/or intergovernmental agencies. Track 2 concerns 'unofficial dialogue and problem-solving activities aimed at building relationships and encouraging new thinking that can inform the official process'. Track 3 is diplomacy between countries at the civil society level, 'people to people' (UNIP, 2016).

TWM takes longer and costs more, in complex, multi-country environments, than outsiders often suppose; and the results are unlikely to be exactly what was first intended.

Description of the thematic area

Intervention logic

The graphic depiction of the reconstructed intervention logic for TWM presented in Figure 3.5 shows the causal pathways along which interventions were meant to lead to the intended results.





Transboundary watershed authorities were the main focus of support to improve TWM. By improving the financial and technical capacity of these organisations, it was expected that they would be able to improve water use allocation, regulation and its enforcement. This process was also expected to be supported through Dutch diplomacy, which should encourage countries to adopt a more cooperative attitude by signing or ratifying water treaties on TWM. This is usually a long-term process and separate from support to a watershed authority, which may be already functioning based on a mandate from earlier treaties/plans. A new treaty may expand the mandate of the authority. Decision-making was expected to take place based on clear agreements between countries and informed by information gathered and shared about the basin. The information was expected to be instrumental in acceptance of transboundary arrangements and agreements by the riparian countries.

Activities

The main centrally funded TWM activities were (co-)funding of three WB-administered trust funds: (1) for the Nile Basin Initiative (NBI); (2) for specific environmental and local development measures of the Organisation pour Ia Mise en Valeur du Fleuve Sénégal (OMVS, partly funded from the delegated budget of the Dutch embassy to Senegal); and (3) for the WB programme Cooperation in International Waters in Africa (CIWA, 2013-2020). In addition, funding was provided for smaller activities of organisations that were concerned with research, training, networking and dialogue in support of regional cooperation in water, such as the SADC HYCOS (2003-2013); the WUR South America multi-country dialogue (concertation); research and capacity building for peasant and indigenous water management (2005-2012); regional Asia Cross Boundaries Water projects (2005-2012); and support to the Middle Eastern Centre for Desalination Research (MEDRC) programme (2013-2015).

Through the delegated budgets for African countries, support was provided to the development of the upper Niger River basin through a sequence of projects (GIRENS, GIRE). For the improvement of cooperation between South Africa, Swaziland and Mozambique, assistance was provided in the framework of the Incomati Maputo agreement. Another (small) delegated activity in Southern Africa focused on environmental flows in the Zambezi River. TWM activities were also executed for two African lakes, focusing on ecosystem improvement. In Asia, TWM support for the development of early warning systems for the Mekong River was provided, and the Netherlands funded the Ecosystems for Life initiative to promote collaboration between Bangladesh and India on the shared Ganges, Brahmaputra and Meghna river systems.

Table 3.3 Transboundary water management: activities and expenditures by river basin					
River basin	Number of activities	Expenditures EUR million			
Nile	2	23.8			
Senegal River	4	22.2			
Niger	3	9.7			
Mekong River	1	9.0			
Incomati/Maputo	1	7.4			
Lake Kivu	2	5.0			
Lake Edward	1	3.2			
Zambezi river	1	0.5			
Multiple basins	5	22.9			
Other	3	3.3			
Total	23	107.0			

With reference to the inferred intervention logic of TWM shown above the result chains of the 19 TWM activities with a budget over EUR 1 million were reviewed to determine how often result areas were mentioned. As Figure 3.6 shows, the portfolio of TWM activities focused in particular on improved capacity and the collection and/or sharing of information.



Figure 3.6 Focus of activities within the reconstructed intervention logic transboundary water management

Findings: effectiveness

Findings on effectiveness derived from activities' evaluation reports and from country and activity studies are presented below.

The World Bank-administered **Nile Basin Trust Fund** (NBTF), established in January 2003, was the mechanism by which ten donors, including the Netherlands (using central funds), contributed to the Nile Basin Initiative (NBI) over the period 2003-2013. The overall purpose of the NBTF was to assist in the preparation and/or implementation of the NBI Strategic Action Programme. This comprised a Shared Vision Programme (SVP) and two Subsidiary Action Programmes (SAPs), formulated by riparian states and endorsed by the Nile Council of Ministers of Water (Nile-COM). The total funding over ten years of cooperation amounted to USD 191 million, of which the Netherlands contributed EUR 38 million through its Bank-Netherlands Partnership Programme (BNPP). The convening power of the World Bank was cited as a rationale for the WB Trust Fund modality. Funding was also provided to the Institutional Strengthening Programme (ISP), building on the results of the SVP. A portfolio of projects was developed in response to projects proposed by participating countries. The NBI provided a temporary framework for cooperation, pending a formal Cooperative Framework Agreement (CFA) signed by all governments of riparian countries.

An external final evaluation of the NBTF in 2013 assessed the effectiveness as moderately satisfactory in achieving the objectives of its Strategic Action Programme. Much of the portfolio of NBTF projects was concerned with laying the foundation for improved trust, cooperation and capacity in the basin – with action on the ground nascent. The program created networks and partnerships that brought people together across the Basin countries in various water-related sectors. The NBTF helped to significantly build the capacity of the NBI (Earle et al., 2013, p. 69). Through work on joint projects on a range of critical issues, the SVP advanced a shared understanding of the need for regional engagement between the countries, including in water resource management, environment, wetlands, and regional energy trade. The projects yielded a more organised knowledge base; a Decision Support System (DSS) and other tools to better understand, model and analyse the basin; an inventory of wetlands; plans for watershed management and regional power generation and transmission; studies of agricultural productivity and opportunities for water savings; and training for over 2,000 professionals. The NBTF supported 28 completed NBI projects and an Institutional Strengthening Project. In addition to the USD 191 million pledged by donors to support the projects over ten years of operation, over USD 1.3 billion was attracted as investments to the SAPs (Earle et al., 2013, p. 1).

The momentum built up for sustaining the NBI basin-wide cooperation process was not assured, however. Country contributions to the core budget were still at a low level. Not surprisingly, given the number of riparian states and the diversity of their economic and environmental interests, development and signature of the intended Common Framework Agreement was an administratively and politically complex challenge. This was compounded by the signing of a sub-basin Declaration of Principles on the Grand Ethiopian Renaissance Dam Project outside the NBI framework by the three countries involved (Ethiopia, Sudan and Egypt).

With delegated and central funding, the Netherlands supported the **Organisation pour Ia Mise en Valeur du Fleuve Sénégal** (OMVS)³⁰ through a World Bank-administered Trust Fund. The Senegal river basin stretches over four countries: Mali, Guinea, Senegal and Mauretania. The OMVS is a regional water management body for the Senegal river basin, considered to be one of the better functioning international water management authorities. Its member states have given the OMVS full authority over the river basin and the financial resources reserved for its management. It was set up initially to address negative environmental effects of dam construction by fighting typha (an aggressive invasive plant) and by addressing bank erosion in the Senegal river. Typha blocks irrigation channels and clogs lakes and river arms, thus inhibiting regular water flows, reducing navigability, reducing fish stocks and imposing health risks in the delta of the river.

The evaluation of Phases I and II of Trust Fund support to the OMVS reported that close to 40 km of river banks had been cleared and around 14,000 ha of land could be irrigated again as a result (Lanser et al., 2013, p. 7). Complaints over irrigation water constraints had diminished. Food production increased and fishermen indicated that they regained good

fish harvests. Water quality was reported to have improved considerably with strong reduction in bilharzia incidence and in other waterborne diseases in the villages in the delta. Water supply facilities had been installed in some villages and as a result access to water for domestic use improved (Lanser et al., 2013, pp. 9-11). However, the maintenance machinery and system for clearing river banks was found to not yet be functioning well and sustainably (Lanser et al., 2013, p. 15). Institutional conditions for maintenance and follow up irrigation and drainage measures were found to be complex, with different organisations having responsibilities for different parts of the river areas and types of work, not all under the control of OMVS and varying between countries. Typha control was stated to require concerted action among all actors to stem regrowth and maintain levels of control. Some of the institutional arrangements were put in place, but still needed strengthening (Lanser et al., 2013, p. 20). The OMVS was reported to be convinced of the urgency, but still needed to initiate and supervise sound planning and implementation schedules and make financial reservations.

To be funded from the central IGG budget, Phase III was expected to start in 2014. Preparation of the WB trust fund took a very long time however, and phase III was only launched at the end of 2016. A spokesperson of OMVS reported in March 2017 that the Senegalese part was still clean and well maintained. On the Mauritanian side, the channels were said to be slowly degrading. OMVS was stated to be confident that the problems would be resolved, as Phase III had now been launched and would in part be used to set up sustainable maintenance structures. These were reported to be being set up in the form of maintenance funds financed by the OMVS states and by revenues from user payments.

The **Cooperation in International Waters in Africa** (CIWA) programme, launched in 2011, sought to support riparian governments in unlocking the potential for sustainable, inclusive, climate-resilient growth by addressing constraints to the cooperative management and development of international waters. CIWA intended to achieve this by improving the quality and accessibility of information, strengthening institutions, and providing support for preparing and/or improving the quality of investments with regional benefits. It provided grant funding for transboundary river basin activities, with three modes of engagement: sustained basin engagement, opportunistic engagement and knowledge building/capacity development. It set a target of raising and using USD 200 million over ten years. The Dutch contribution to the WB CIWA Trust Fund for 2014-2018 was USD 25 million, to be disbursed in equal annual instalments. Other supporting donors were the UK, the EU, Norway, Sweden and Denmark.

An external mid-term review in 2015 (Pegasys, 2015) concluded that CIWA had done well in strengthening cooperation in transboundary waters and advancing investments across Africa. Recipients considered the programme to be highly relevant. With four basin projects accounting for 75% of the allocable budget and a useful blend of knowledge management, information, institutions and infrastructure projects under the catalytic sub-programme, it was reported to be well placed for a productive period that should see the existing budgets spent. However, the MTR's long list of recommendations for improving the programme indicated that much remained to be done to achieve adequate effectiveness and efficiency.

Many management, procedural and monitoring arrangements required improvement, and a gender strategy was needed (Pegasys 2015, pp. ix-xiii).

The Flood Management and Mitigation Programme (FMMP, 2004-2010) for the Mekong River was established to support TWM for managing flood risks in this major Asian river system. Large areas of the Mekong Delta flood annually, which is a natural phenomenon with environmental benefits. Often basin flooding is the only source of natural irrigation and soil enrichment. The floods become a problem when flooding intensity or duration increases, mainly due to human interventions. Cambodia, Lao PDR, Thailand and Vietnam signed the Agreement on the Co-operation for the Sustainable Development of the Mekong River Basin in 1995, and a firm institutional framework was established: the Mekong River Commission (MRC). After severe floods in 2000-2002, the MRC took up a role in the management of flood risks in the Lower Mekong Basin. The FMMP was endorsed by the MRC Council in 2004, and funding was supported by seven donors, including the Netherlands. The FMMP's objectives were to establish a Regional Flood Management and Mitigation Centre (RFMMC); to start structural measurements and flood proofing; and to enhance cooperation around transboundary flood issues (Van Woersem and Joy, 2009). During the FMMP, 2004-2010, the Dutch government was the biggest donor. After 2010, the Netherlands supported a bridging period to start the execution of FMMP 2011-2015 and to formulate a strategic plan. The Dutch government was not involved in funding of this next phase. The MFA expenditures over the review period 2006-2015 were EUR 9.0 million.

An external evaluation found the FMMP project to have been effective in producing a number of quality products and services, with special reference to flood forecasting and enhancing cooperation in addressing transboundary flood issues. Tangible outputs had been realised in the member countries in the fields of flood forecasting, transboundary issues and capacity building, especially in relation to pilot projects. These tangible outputs were highly appreciated by the member countries. However, the flood forecasting outputs were still underutilised by the member countries. The delivery of many products and services to the ultimate end-users (dissemination) had been initiated, but still had a long way to go. The effectiveness and value-added of FMMP products ultimately depended on a successful dissemination and application of products and services. FMMP did prove to be an instrument for the MRC in enhancing cooperation between the four member countries and Myanmar and China. The MRC and FMMP requested attention for transboundary issues between the Cambodian Floodplain and the Vietnam Mekong Delta in the context of future dam/reservoir construction, especially in the mainstream of the Mekong River upstream of the delta. This important MRC process was initiated, but the full potential of FMMP was still to be tapped (Van Woersem and Joy, 2009, p. 8).

Phase II of the project in support of the **Southern Africa Development Community-Hydrological Cycle Observing Systems** (SADC-HYCOS, 2003-2010) was a follow up of the SADC-HYCOS project (1998-2001), whose goal was to strengthen capacities of National Hydrological Services (NHSs) by providing management tools for sustainable development and management of water resources. The Dutch contribution amounted to EUR 1.5 million. The objective was to develop the national and regional capacity in the fields of water resources assessment, monitoring and management. A 2010 evaluation of SADC-HYCOS found that the project achieved a large part of the planned outputs but its sustainability was not clear and there was no vision of how the project would function in the future (Rhebergen, 2010, p. 30). Seven years after the evaluation, this review's Mozambique country study encountered serious doubts as to whether the few stations that were supposed to be placed in Mozambique were still operational. Measurement devices had to be operated by the water authorities (ARAs), but the hydro-stations were found to be too complex; a simple rainfall station would have been sufficient. Furthermore, the required quality control of data was lacking.

The government of the Netherlands has been a staunch supporter of the Middle East Desalination Research Centre (MEDRC) throughout its existence. In 2005 it co-funded MEDRC with USD 3 million for the period 2005-2015. Due to the critical financial situation in 2009, the MFA agreed with the proposal from MEDRC to accelerate the spending from USD 300,000 to USD 500,000 yearly. A new financing agreement was signed for USD 1.3 million for the period 2013-2015, later extended to 2016. The objectives of MEDRC were to contribute to the peace process in the Middle East and to improve livelihoods by improving technical processes involved in water desalination. An objective added later was to create a model organisation for use in other peace processes and in dealing with regional or transboundary environmental challenges (Saaf, 2016, p. 7). The core governments involved were Israel, Jordan and the Palestinian Authority. The 2016 external evaluation found that the MEDRC had expanded and developed its research activities since 2012 and increased its training volume by a significant margin. However, the participation of Israeli and Palestinian participants in the trilateral trainings that were expected to contribute to the peace process was lower than expected and intermittent (Saaf, 2016, p. 9). A survey among alumni showed a high level of satisfaction about the courses, although one third of respondents reported not to be applying the obtained knowledge. The evaluation noted that impact on improved regional cooperation in the water sector is difficult to measure and attribute. However, if the willingness to continue engaging with MEDRC can be seen as a proxy indicator, the conclusion that MEDRC was effective was warranted (Saaf, 2016, p. 11).

The portfolio of projects supported with delegated funding through the Netherlands embassy in Bangladesh only included one project focused on TWM. This was renamed **Ecosystems for Life: A Bangladesh-India Initiative** (E4L), reportedly after Indian objections to the inclusion of 'transboundary' in its initial title. The defining feature of E4L was that it was an initiative in Track 3 diplomacy. This made it difficult for the project to contribute to strengthened arrangements and formal agreements over TWM. Instead, the project focused on shared exploration of and dialogue about TWM issues between Bangladesh and India, linking civil society groupings and knowledge institutions. Its final report described its strategies as 'joint research, dialogues, knowledge management, capacity building, engaging with research institutions, engaging with Government agencies, partnering with Universities, working with media professionals and introducing young professionals to the importance of cooperative management of shared ecosystems' (IUCN, nd, p. 8). Despite its Track 3 character, the project did claim some influence on the two governments' thinking, by including government representatives in various dialogues and, it claimed, sharpening the focus of some intergovernmental discussions, e.g. on navigation. It also reported progress in the conservation of the hilsa fish in West Bengal (IUCN, nd, p. 22). In a marginal sense, it can therefore be claimed that the E4L project did lead the governments of Bangladesh and its neighbour to allocate budgets and/or take measures for the sustained implementation of TWM arrangements. But substantive action and progress remained dependent on Track 1 diplomacy. Much therefore depended on relations between the governments of the two countries, and between Bangladesh and the Indian state of West Bengal (GOB, 2016, p. 152). These issues were beyond the scope of the Dutch-funded project. China's management of the Brahmaputra is highly significant for Bangladesh (GOB, 2016, p. 144), but the E4L project did not involve any dialogue with China.

An external review of E4L concluded that 'the project has already made a valuable contribution to the knowledge base. It has also been catalytic in widening the thinking of the many scientists and practitioners involved in joint research studies, helping them to embrace the ecosystem-based approach to river management, as well as creating productive institutional links between Bangladesh and India that, in some cases, have already resulted in additional opportunities for cooperation beyond E4L' (Glaholt et al., 2014, p. i).

By far the most significant Dutch support for **Mali**'s engagement in TWM concerned the Niger river and, specifically, co-operation with Guinea in improving management of the **upper Niger basin**. From central funding and through PCA-GIRE support by the Netherlands-Sweden Programme Conjoint d'Appui à la GIRE (PCA-GIRE) to the Direction Nationale de l'Hydraulique (DNH), there was also assistance to the Autorité du Bassin du Niger (ABN), which brings Mali and all nine Niger riparian states together.

Although carried out at a relatively modest technical level, the Dutch-supported collaboration with Guinea did develop joint monitoring and management approaches and promoted the gradual adoption of IWRM principles for the upper Niger basin. For example, piezometric, water quality and flood monitoring systems were set up in both countries (although sustainable funding problems arose in Guinea as soon as Gestion Intégrée des Ressources en Eau du Niger Supérieur (GIRENS) Phase II ended (Hansen et al., 2010, p. 19). While formally sanctioned as TWM by the two governments, the work of GIRENS appears to have been more at project level than at intergovernmental level, with the project operating from its offices at Bamako and at Kankan in Guinea. Participation and contributions from the Guinea side were generally weaker, and the GIRENS II evaluation reported weak involvement of Guinea state representatives (Hansen et al., 2010, p. 47). Again with slower inputs from the Guinean side (GOM & GOG, 2017, p. 9), PCA-GIRE continued these technical efforts (GOM & GOG, 2017, p. 20).

Developing and implementing a TWM programme between two low-income countries like Mali and Guinea, with poor logistics, complex institutional frameworks and difficult security conditions, was bound to be challenging. PCA-GIRE's progress (following initial delays) was modest in 2016. TWM can generally be divided into technical, field-level work – for example setting up community structures and water management efforts, and building joint scientific programmes on issues like water quality – and higher-level intergovernmental work that may lead to major water management decisions – for example, concerning the proposed (and controversial) Fomi dam in Guinea. The latter type of work, in particular, is likely to be slow, and during the review period there were no major achievements.

Over the review period, MFA support thus contributed to a gradual strengthening of institutional arrangements and formal agreements between Mali and Guinea for TWM in the upper Niger basin, broadly compliant with IWRM principles. The higher-level formal agreements between these two countries and the other seven riparian states through the Autorité du Bassin du Niger were not materially affected by Dutch support during this period. Similarly, GIRENS and PCA-GIRE achieved some strengthening of the implementation framework for TWM agreements between Mali and Guinea, although many constraints and obstacles to effective TWM remained to be overcome – not least because neither riparian country had allocated sufficient budgetary or institutional resources to assure the long-term continuation of the approaches, systems and management measures that Dutch support helped to put in place.

Phase I of the project for **Progressive Realisation of the Incomati-Maputo Agreement** (PRIMA) was the main TWM activity supported by the Netherlands in Mozambique during the review period. The project arose from the signature by Mozambique, South Africa and Swaziland in 2002 of a tripartite agreement for the protection and sustainable use of the Incomati and Maputo watercourses. PRIMA Phase I focused on the facilitation of, and related institutional development for, 12 projects making up an Implementation Activity and Action Plan, under the auspices of an existing Tripartite Permanent Technical Committee. This was intended to lead to the signing of long-term Comprehensive Agreements on the management of the two rivers, which would become the responsibility of a permanent river basin organisation (RBO) covering them both. It was hoped that co-funding would be secured for at least some of the 12 projects, but this did not happen. Ultimately, after an extension and budget increase for the Netherlands-funded project, PRIMA I implemented nine of the projects (according to informants). The three governments had not agreed to establish the RBO.

From the perspective of short-term delivery of outputs, PRIMA I was partly effective. The main constraints on full effectiveness for PRIMA I, and the main reason why the planned PRIMA II (originally intended to start in 2012) had not started by the end of the review period, were institutional and political. There were two aspects to this problem. First, the three southern African governments found it difficult to agree a way forward, partly because they did not see this as a high political priority and partly because of various domestic, bilateral or three-way disagreements within and among them. Secondly, the Netherlands was seen in some quarters as having followed an inappropriate negotiating strategy with its three partners: not proactive enough, according to some; too inflexible and insensitive to local priorities, according to others. The net result was uncertainty at the end of the review period as to when and in exactly what shape the planned RBO, the Comprehensive Agreements between the three governments, completion of the 12 projects and appropriate longer-term IWRM of the two catchments would proceed. The Netherlands embassy,

meanwhile, was preparing a revised, simpler PRIMA II proposal through which to provide further support for the process.

Findings: efficiency

Findings on efficiency from the available evaluations are presented below, along with comments on efficiency arising from country case study investigation of TWM activities.

The efficiency of the **Nile Basin Trust Fund** was assessed as moderately satisfactory, as it managed to get the full portfolio of projects implemented within budget and thus reduce the overall administrative burden – although some were delayed and more could have been done to reduce the burden. The management structure of the NBTF was kept simple and generally operated with low transaction costs and provided 'timely and efficient administration of funds', which was one of the reasons for choosing a trust fund (SIWI, 2013, p. 2). To enable full disbursement of NBTF funds in support of NBI, an additional project, the Nile Cooperation for Results (NCORE) Project, was approved in December 2012. The NCORE project was co-funded by the new WB Trust Fund Cooperation in International Waters in Africa (CIWA).

The efficiency of the **Flood Management and Mitigation Programme** for the Mekong river was stated to be hampered by lack of donor harmonisation and alignment (Van Woersem and Joy, 2009, p. 12). Other issues were high costs for FMMP and MRC of senior staff involved; three programme extensions; and the fact that progress was only achieved for some of the agreed key results over a longer period. Although the Dutch government had withdrawn its funding involvement in FMMP II (2011-2015), it did pledge support to the implementation of the strategic plan of the MRC for 2016-2020. Despite the absence of Dutch funding during the second phase, the execution of the FMMP was found to be instrumental in collaboration between a number of Dutch institutes and companies, involving them in the formulation of the Mekong Delta Plan (MDP, linking the work to the FMMP). For information on future flood damage, FMMP was reported to use work done for the MDP with Dutch support.

The evaluation of the **SADC-HYCOS** project did not assess efficiency but it did report long delays in delivery of key outputs, such as the installation of planned Data Collection Platforms (Rhebergen, 2010, p. 25).

Organisationally and operationally, **PRIMA I** in Mozambique was far from efficient. Additional time and budget had to be agreed, and while consultant service providers were able to deliver some of the technical outputs as planned, the achievement of the planned outcomes was severely constrained by the institutional and political factors outlined above. There is no formal evaluative assessment to refer to for PRIMA I or for the Ecosystems for Life project in Bangladesh. But both experiences are reminders that the most important results of such TWM projects are qualitative, institutional and political – and thus not amenable to any kind of empirical efficiency analysis. They are reminders, too, that the odds are stacked against efficiency in such ventures, because of their fundamentally political nature and because of the number of stakeholders that are typically involved.

Some concerns in TWM span efficiency and effectiveness. One is whether Dutch TWM support should all be coordinated from The Hague in order to avoid the potential bias that coordination by an embassy in one of the riparian states could theoretically cause. Observations during this evaluation did not identify any significant bias of this nature. The more important issue is where there is adequate coordination capacity, which may vary from one TWM project to the next; and whether the roles of the centre and of embassies are clearly defined and understood. A broader concern is whether the Netherlands performed adequately in terms of water diplomacy: applying expertise and influence at the intergovernmental level to resolve tensions between countries over shared water resources and to optimise the joint management of those resources. Overall, it must be concluded that, while substantial progress was made in various technical fields of TWM, higher-level diplomatic progress was often limited. In some cases, this was because Dutch engagements with partner governments were not adequately sensitive to local priorities and perceptions. In others, it was because the TWM activity focused more on track 3 diplomacy and technical cooperation than on the more challenging track 2 and 1 levels of diplomacy. This resonates with another major finding of this review: technical progress was easier than institutional progress, especially where that progress had to be shared between sovereign nations.

3.4 Broader and cross-cutting policy themes

Introduction

This section addresses the evaluation questions on cross-cutting themes (CCPT) that were prominent in MFA policy during the review period: climate change, environmental sustainability, governance; and gender and women's participation. It also assesses MFA water management policy performance with regard to the overall Dutch policy objective of poverty reduction, looking in particular for efforts to focus interventions on benefits for the poorest and/or marginalised groups (MFA, 2012, pp. 3, 14).³¹ The approach to the integration of the policy themes in policy implementation was through integration in water management programmes and projects and through specific projects that focused on them. This section also considers the contribution of the Dutch water sector and whether this benefited it, which is the subject of one of the three evaluation questions below.

³¹ The 2012 Water for Development policy states that the letter addresses the resolution of the member of parliament Dikkers to take sustainable poverty alleviation and reaching marginalised groups as the criterion for development policy for food security and water (MFA, 2012, p. 3).

Evaluation questions

- 15. Have improvements in water management come about while also issues of climate change, environmental sustainability, good governance, gender and poverty were addressed?
- 16. Have improvements come about while maintaining or improving water management benefits for lower income groups and women beneficiaries? Are these groups represented in layers of decision making?
- 17. Did the Dutch water sector become more involved in achievement of aid policy objectives? Were the reputation and economic opportunities of the Dutch sector enhanced?

Summary: integration of broader and cross-cutting policy themes

Issues of climate change, environmental sustainability, good governance, gender and support for the poorest or marginalised groups were addressed to varying degrees in the implementation of Dutch (co-)funded programmes and projects that sought to improve water management. Dutch assistance facilitated growing action on **climate change** adaptation, through support to specific awareness raising, planning and piloting activities and through inclusion of these issues in project design. Dutch assistance to water management generally facilitated the further mainstreaming of climate change action into partner countries' planning and strategies. But achieving practical action proved challenging. Overall, even if climate change is not explicitly addressed, improvements in water productivity and protection from flooding may be expected to contribute to climate change adaptation, although the extent and recognition of that risk vary. **Environmental sustainability** was naturally central to the IWRM approaches that were normally pursued, although few activities left convincing evidence that it was achieved. Tackling **governance** aspects was inextricably linked to the political and institutional challenges that often constrained the performance and sustainability of these activities.

Gender and poverty did not have a high profile as explicit targets, despite the centrality of poverty reduction as an overall policy objective. As in many areas of development cooperation, approaches to gender tended in practice to be superficial rather than transformative, although some probably lasting benefits were achieved. Water management is a challenge to all strata of society, and its benefits are likely to accrue to the better off as well as the poor. Achieving an effective focus on the poorest groups in water management activities is therefore not as simple as it might seem; and, as in all modes of community-based natural resource management, richer groups must be motivated to participate rather than weakening or capturing the effort from outside. These delicate compromises were not always reached. Progress was made in strengthening the representation of women and the poor in local water management institutions. But membership of such bodies does not necessarily mean active participation or meaningful influence. The deeper social and institutional changes needed to achieve that transformation were still in progress.

Dutch policy on strengthening the roles of the **Dutch water sector** in cooperation with developing and transitional countries achieved more in some of those countries than in others. The Dutch sector could not be described as a 'driving force in improving water management'. But it was a useful contributor in some cases, most notably where Dutch planning expertise could be applied to significant infrastructure challenges that promised substantial commercial opportunities. In some cases, the market position of the Dutch water sector was certainly strengthened by participation in development cooperation activities. Several private sector informants said that their companies would not have got where they have commercially if they had not been able to build on that involvement and experience. In some cases, this kind of combination was largely irrelevant.

Dutch knowledge institutions and water authorities also made useful contributions in several countries. The former, in particular, contributed to the 'soft power' of the Netherlands that, although intangible, is a major asset for the country in increasingly competitive commercial conditions. Many countries' decision makers and specialists in the water management sector have Dutch training, are familiar with Dutch knowledge institutions and private sector operators, and instinctively turn to the Dutch water sector as they face new water management challenges. Although perhaps not an explicit policy intention, this was a significant achievement during the review period.

Findings: effectiveness

Findings on effectiveness, derived from activities' evaluation reports and country and activity studies, are presented below.

Climate change adaptation and mitigation

Many of the activities had a reported relevance for climate change adaptation and/or mitigation, and an increasing number took up this theme in activity design. Most of this concerned adaptation, for example through flood protection and water conservation. Even if climate change was not explicitly addressed, improvements in water productivity and protection from flooding may be expected to contribute to climate change adaptation. However, there was significant variation in the urgency of climate change adaptation, compared to other risk factors such as unsustainable use of groundwater and land subsidence, and the urgency with which partner countries perceived the threat of climate change. Only three activities had specific mitigation objectives. These concerned Dutch assistance aiming at reduction of greenhouse gas emissions due to conversion of peatlands and forest areas for productive purposes.

Climate change adaptation and/or mitigation objectives were not often a primary focus of water management in agriculture. An exception was the **IFAD Adaptation for Smallholder Agriculture Programme** (ASAP 2012-2016) referred to in section 3.2. An external progress review stated that ASAP had provided a significant financial and technical boost to mainstreaming climate change into IFAD and enabled the organisation to engage

systematically with the concept of resilience in its programmes. ASAP was stated to have been very successful in changing decision and policy processes for investments to be sensitive to issues of climate change through design. Innovative staff training on climate change had increased awareness and understanding at decision making levels in IFAD HQ and ASAP supported project teams (ODI, 2015, p. 4). However, no tangible outcomes were reported as implementation was still at an early stage.

During the earlier half of the review period the **VU-IVM Adaptive Water Management at the Local Scale** (ADAPTS) project (2007-2012) was supported with MFA central funding: a project budget of EUR 2.0 million, almost all of which was used. It aimed to increase developing countries' adaptive capacities by achieving the inclusion of climate change and adaptation considerations in water policies, local planning and investment decisions. Whereas an earlier ADAPT project (like many initiatives at the time) focused on climate modelling, the specific challenge of the new ADAPTS instead was to start climate change adaptation from the improvement of local processes. The activities undertaken by ADAPTS came in three categories: (1) implementing local adaptation measures; (2) analysing possible up-scaling of these local initiatives and (3) supporting multi-stakeholder policy dialogues with local actors to generate climate-proof water management strategies. Originally, ADAPTS set out to operate in six countries: Botswana, Brazil, Ethiopia, Ghana, Peru and Vietnam – all countries subject to different climate change impacts. In all countries except Botswana, a relatively small river basin or sub basin was selected to work in.

The external evaluation of the project concluded that modest results were achieved. The main added value was described as the initiation of local processes of climate adaptation and basin management with links to implementing activities, engagement of local stakeholders and the promise of larger outreach (Van Steenbergen, 2012, p. 31). A common element was that the country programmes were stronger at local than at national policy level, which may be a strength rather than a weakness because the local policies were closer to implementation, more related to budgets and more contextualised (Van Steenbergen, 2012, p. 33). Expectations of results were found to be unrealistic, partly due to implementation time being too short to build critical mass, achieve replication and sustain change.

For 2012-2017, major co-funding (EUR 45 million) was provided from the MFA central budget to the **Least Developed Countries Fund for Climate Change** (LDCF CC) under the WB-administered Global Environment Facility (GEF). An independent MTR of implementation of the LDCF CC through National Action Programmes for Climate Change (NAPAs) was positive overall, concluding that agriculture, IWRM and natural resource management were key adaptation issues and that a large majority of projects were aligned with their respective NAPAs. All projects were found to be consistent with LDCF strategies, eligibility criteria and priorities. NAPA projects were mainstreaming gender into adaptation initiatives. A large majority included wide stakeholder involvement and are assessing risks (GEF, Independent Evaluation Office 2014, p. 5).

In **Bangladesh**, Dutch policy clearly recognised the growing threats that climate change posed to water security and water safety. The Netherlands co-funded one project whose title

explicitly referred to the issue: Enhancing Resilience to Natural Disasters and the Effects of Climate Change in Bangladesh, an initiative of the United Nations World Food Programme that worked in 2014-2015 with communities in the south of the country to improve drainage and flood protection through labour-intensive public works. The Netherlands contributed EUR 1.3 million to this activity, which was not evaluated. Environmental sustainability in the face of climate change, rapid economic growth and urbanisation was a central theme for the **Bangladesh Delta Plan 2100**. In identifying its priority sectors the plan stated that 'gender mainstreaming, urbanisation and climate change shall be considered as cross-cutting issues relevant to main and other priority sectors' (GOB, 2016, pp. 61, 258). The BDP process included a baseline paper on climate change issues and identified a series of adaptation measures. This review's country study noted that one of the immediate outcomes of the BDP was that the World Bank and the ADB were facilitating potential support for Bangladesh from the Green Climate Fund. Eventually linked to the BDP was PvW support for a Bangladesh Climate Adaptation Atlas, since absorbed into the Bangladesh Delta Atlas. Climate change is undoubtedly a real issue for residents of southern Bangladesh, as many informants told this review's field mission. The Blue Gold project was one of the Dutch-supported activities that addressed this.

Although a number of water management initiatives in Bangladesh that were supported by the Netherlands addressed climate change in various ways, there is little evaluative evidence to use in assessing their effectiveness. The World Food Programme activity that supposedly focused on climate change resilience was not evaluated. Evaluations of other activities, such as the BDP 2100 and Blue Gold, made little explicit reference to the effectiveness of their work in promoting climate change adaptation, although the MTR of Blue Gold did suggest an adjustment of priorities and the introduction of alternative strategies for enhanced climate resilience in polders (Van Steenbergen et al., 2015, p. 31).

In **Indonesia** too, climate change received ample attention in Dutch policy and planning; but effectiveness in developing climate change strategies was not a focus of the evaluative material available to this review. The Netherlands Embassy's multi-annual strategic plan for 2008-2011 pointed out the challenges of rising sea level and greater variation in rainfall, both linked to climate change. In its discussions with the Government of Indonesia, the Netherlands promoted its expertise in climate change adaptation and mitigation. The (ultimately curtailed) Dutch support for enhanced management of Indonesia's lowland and peatlands was a response to concern in the Dutch parliament about the impact of their conversion for agricultural purposes on greenhouse gas emissions and thus on climate change. As a follow up to that activity, Dutch expertise was centrally involved in the Water Management for Climate Change Mitigation and Adaptive Development in the Lowlands (WACLIMAD) project, which was implemented by the World Bank using Dutch trust funds between 2010 and 2012. WACLIMAD was followed in 2012-2013 by a PvW-funded activity, Quick Assessment and Nationwide Screening (QANS) of Peat and Lowland Resources and Action Planning for the Implementation of a National Lowland Strategy. Beyond the usual formal statements about environmental responsibility and impacts, there is no evidence that environment and climate change were significantly mainstreamed in WISMP I or PISP, two major irrigation activities to which the Netherlands contributed

funding – although IOB's impact study of these projects found that water availability was decreasing in east Java because of climate change (Schenk and Heun, 2017, p. 55). In Jakarta and elsewhere on the north Java coast, meanwhile, climate change and consequently rising sea levels were a less immediate concern than flooding from existing river regimes and ocean dynamics. Strikingly, there was a sense that Indonesia had more immediate water management challenges to deal with than those that will arise from climate change. As one expert informant put it, socio-economic change is much more important than climate change in Indonesia for the time being. The Dutch policy priorities in the country reflected this.

It was in **Mali** that this review's country studies found climate change to be the most immediate concern for informants. They pointed repeatedly to the increasing variability in rainfall and river flows, arguing that average years had ceased to exist. Climate change had gained genuine traction as a policy and programming priority in Mali. The Dutch-funded **Projet d'Appui à la Sécurité Alimentaire et la Résilience des Populations aux Crises Climatiques et Sociales dans la Région de Mopti** (PASARC) project aimed, inter alia, to enhance the climate resilience of rural communities. Responding to MFA concern on the issue and to the procedures for developing country climate change profiles, the Netherlands embassy in Bamako organised a workshop with the Government of Mali and development partners, and was considered by informants to have made a significant effort in this regard, despite the many other pressures and priorities that it faced. Overall, review of the Mali portfolio confirms that it was implemented with considerable (although not always best placed) attention to environmental concerns and, increasingly and especially, climate change.

In Mali, it was again difficult to find focused evaluative evidence of the effectiveness of Dutch-funded activities with regard to climate change. Netherlands support was demonstrably aware of environmental and climate change concerns. But it was not able to address them as effectively as it should. This was due to the difficulty of identifying appropriate technical solutions; the challenging and often insecure working environment; and the failure of macro level water management planning to make properly informed technical choices

Environmental sustainability

Environmental sustainability is, of course, a central element of IWRM – whose definition includes 'without compromising vital ecosystems' (see section 1.2). Many Dutch-supported water management projects did consider environmental and ecological concerns during design and implementation, although few of them put ecological issues/approaches in the forefront. The study found some projects that were very responsive to ecological concerns. For example, work in the Inland Delta in Mali included **PASARC** (see above) and the **Programme d'Aménagement du Delta Intérieur du Niger** (PADIN). Both projects supported a range of intended enhancements to crop and fish production, and thus the food security and livelihood resilience of the local population, on the basis of improved water use and enhanced environmental sustainability.

The study also identified projects piloting ecologically sensitive approaches to coastal protection, such as the **Building with Nature** PPP project for improved coastal defence and development in **Indonesia** (funded by the Sustainable Water Fund). This activity aimed to combat coastal erosion, rehabilitate mangrove belts, enhance water resources for aquaculture and reduce the risk of flooding for the local communities. It focused on constructing permeable structures to trap sediment, encourage mangrove re-establishment and increase biodiversity and water resource productivity. The Dutch support earlier in the review period for enhanced management and sustainable use of Indonesia's massive peat/ lowland resources was discussed above in terms of climate change, but could equally be seen as a contribution to achieving environmentally sustainable use of these degraded resources.

UNDP's **Wetlands Project in Pakistan** (2004-2014), developed by WWF and co-funded by the Netherlands, aimed to promote the sustainable conservation of freshwater and marine wetlands and tried to mainstream wetlands conservation. The project included an enabling and an implementation phase of progressive, participatory management plans. On impact level, the idea was to develop sustainable management models to scale up implementation, which had not happened yet at the time the MTR was conducted (Rao, 2009). Overall, nearly all planned outputs were behind schedule due to overambitious planning. In addition, the MTR argued, projects focusing on environmental issues required a very broad approach, which made them complicated to align with donors' policy objectives and resulted in slow processes in developing project documents.

The African Conservation Centre (ACC) was responsible for the (ongoing) **Sustainable Landscapes and Livelihoods** project in **Kenya**, and was included in a high-level mid-term evaluation of EKN-funded interventions in arid and semi-arid lands (ASALs; Severijn & Osano, 2013). The ACC activity focused on reconciling wildlife conservation with improving livelihoods using the 'landscape approach', and aimed to integrate indigenous and scientific knowledge. The EKN stayed at some distance from the execution of this and the other ASAL projects, without trying to create strategic partnerships with the project partners. However, the partners generally appreciated this hands-off approach, which gave them room to be flexible and innovative. On the other hand, ACC did not develop an M&E plan, did not undertake baseline studies or specify performance indicators, and did not share best practices.

Most activities under review did not focus clearly enough on environmental sustainability to permit any analysis of effectiveness in this regard. Some of those that did were still at a pilot or learning stage, making such analysis premature. But it is worth noting that, in **Mali**, environmental sustainability is closely linked to maintaining ecologically viable levels of water use, particularly as those levels fluctuate more due to climate change. Political and institutional factors can make promoting this viability difficult. Recent efforts (with a strategic environmental assessment supported by the Netherlands) to assess sustainable increases in offtake for the major Office du Niger irrigation scheme through a new Plan d'Aménagement Hydro-Agricole (PAHA) did not reach a satisfactory conclusion. This was partly because of the authorities' apparent enthusiasm for the maximum (probably unsustainable) water use scenario envisaged in the PAHA, and partly because of a separate large allocation of irrigable land to Chinese interests, which would take Niger water use still further beyond feasible limits.

Governance

Support to institution and capacity building for improved water governance in partner countries was provided through MFA centrally funded, bilateral and multilateral co-funded projects. As reported in chapter 2.1, institution and capacity building and governance systems for infrastructure and services were major focus areas of intervention across activities.

The MFA invested heavily through bilateral cooperation in capacity and institutional development from local to national levels, as well as in physical infrastructure. It was successful in achieving intended project results, at least at output level. But the sustainability of the water governance enhancements achieved was doubtful due to: (1) insufficient political will, and consequently resourcing, from partner governments; (2) the Netherlands' and other donors' inability to change the basic dysfunctionality of institutional frameworks and systems in some of the partner countries; and (3) partner governments' and the Netherlands' failure to make adequate provision for institutional maintenance.

Dutch Water Authorities' involvement in projects did not make a significant difference to improved water governance. This can be explained by limited country context knowledge; the necessary deep long-term engagement and the funding for this had not yet been achieved. Nevertheless, various stakeholders in partner countries expressed strong appreciation for the opportunities that work with these authorities gave them to gain knowledge about the way the Dutch govern water and to learn from the experience.

From the central budget, support was provided through the international NGO the Water Integrity Network to address corruption and promote integrity in the water sector. WIN is a network of organisations and individuals and has as its overall objective to increase integrity levels and reduce corruption in the water sector through a pro-poor and pro-equity focus. As of 2014, WIN was an independent association with a secretariat based in Berlin. To guide the realisation of its objective, a Global Strategy 2011-2016 was followed by an Implementation Plan 2014-2016. The WIN secretariat led implementation. MFA expenditures totalled EUR 1.5 million. This review's country case studies identified WIN affiliates in Bangladesh and Indonesia. In Bangladesh, the local WIN affiliate published an assessment of integrity in the country's water management sector and undertook advocacy and training initiatives. Indonesian partners of the network included CKNET and Pattiro. WIN had one integrated country programme in **Indonesia**: a pilot of integrity management processes for utilities and river basin organisations, conducted by Pattiro and partners. Mali was one of the countries where WIN did an assessment on Water Integrity Risks related to Large Land Deals in Africa (WIN, 2017), but the EKN was not aware of this activity. Much of the organisation's work in the country appears to have been on drinking water and sanitation.

The external evaluation of the WIN Global Strategy 2011-2016 stated that there was a substantial gap between planned outcomes and those achieved. Results achieved were mostly in awareness raising rather than policy change and changes in practice. WIN was successful in awareness raising and was a respected partner in this, having contributed to the drafting of policies, declarations and the OECD principles on water governance, as well as inspiring other organisations to take up the issue of integrity in the water sector. Although several collaborative projects were initiated during 2011-2014, a rather haphazard approach to consolidating the network and its activities did not allow evaluation of whether these collaborative efforts were successful and contributory to WIN's mission. Continuity and sustainability of activities, and subsequently commitment, were reported as issues of concern. Lack of continuity and absence of follow up had caused the leaking away of knowledge, experience and expertise, as well as weakening of relations (Ahlers et al., 2015, p. 44). In **Bangladesh**, the local WIN affiliate was constrained by the sensitivity of governance issues in Bangladesh and, it was felt, by its links with Transparency International.

The primary considerations in discussions of governance are usually ethical and organisational: concerns about transparency, corruption, representation and participation, for example. For water management, another important consideration is structural. There is usually a mismatch between catchment boundaries, at any scale, and political boundaries (countries, districts etc.). The usual response is to create a whole separate system of water management agencies that follow the natural catchment boundaries. This additional layer of institutions is often starved of resources and political attention – which is not entirely surprising in nations that lack resources and institutional capacity. There is an inherent tension between the principles of IWRM and participatory irrigation management, and the realities of governance capacity and will: countries often lack both the resources and the political will to build and effectively use a system of water management institutions. This constrained the effectiveness of many of the water management activities that the Netherlands supported. One international response to this challenge was the concept of 'light IWRM', which 'aims to be problem-focused, opportunistic and adaptive/iterative when applying core IWRM principles especially at the water-users level. The intended outcome of applying light IWRM is a system of managing water resources and water services delivery that has developed incrementally over many years and, as a result, is better adapted or tailored to the political economy of a given area.' However, the same author found that 'the concept of light IWRM has not been adopted widely or picked up by organisations that promote IWRM' (Butterworth, 2014; see also Moriarty et al., 2004).

Gender and women's participation

Gender and women's participation received varying attention in Dutch funded support for improved water management. The policy letter of 2012 specifically mentioned women's participation in water user groups and associations in water management in agriculture projects. Gender and/or women's participation was a component of many of these projects, especially those that included WUAs. Evaluation reports on other parts of the policy, such as on the World Bank Trust Fund water partnership programme, showed superficial attention to this cross-cutting policy objective (Universalia, 2017, p. v).

The Gender and Water Programme **Bangladesh** (GWAPB) was funded through the Netherlands embassy with a budget of EUR 2.8 million between 2013 and 2016. This programme supported six major water management projects with training, capacity building, awareness raising, networking and related activities. One of the GWAPB's contributions was gender action planning with water management projects. The Integrated Planning for Sustainable Water Management (IPSWAM) project contributed to this at the level of the Bangladesh Water Development Board (BWDB), facilitating the launch of a gender strategy for the organisation in 2006.

Promoting gender equality and the empowerment of women was a Dutch policy priority throughout the review period in Bangladesh. This was well reflected in the design and implementation of water management interventions that the Netherlands supported over those years. As with the promotion of any social or institutional change, there was a temptation to tick boxes and to focus on outputs (such as the number of women trained or female members of WUAs) rather than effective mainstreaming leading to meaningful outcomes. But some significant results were achieved, not least due to the efforts of the GWAPB. A recent evaluation found that the GWAPB had achieved some useful outcomes but had suffered from the lack of a formal mandate – for example through a memorandum of understanding with the projects concerned. This made it harder to influence the decision-making and strategies of these projects; and the nature of the challenges being addressed would have needed much longer than the three-year duration of the GWAPB project (PEM Consult, 2016, p. 3).

The 2011 evaluation of the IPSWAM project found that the BWDB had not made much progress in implementing the action plan that accompanied the gender strategy prepared for it by IPSWAM (EKN & BWDB, 2011, p. 26). As the MTR of IPSWAM noted, 'The BWDB... is a very large organisation, with a skill mix oriented towards construction and an entrenched organisational culture and way of working' (Uddin & Van de Putte, 2007, p. 15).

At field level, Dutch-funded projects made significant progress in promoting the profile and roles of women in water management, as well as their economic benefits from land and water use (Sutherland & Hoque, 2010, p. 18). This review's Bangladesh field mission was repeatedly told by women in FGDs that their engagement with these projects had been economically and socially beneficial for them.

Gender did not have a high profile in the design and implementation of Dutch support for improved water management in **Indonesia** between 2006 and 2016. The embassy's multiannual strategic plan for 2008-2011 briefly referred to it as a cross-cutting concern, although it also said that its choice of a multidisciplinary approach meant that subjects like gender would no longer appear as separate themes. This can be seen as perfect mainstreaming or as an indicator of low priority for the issue. The following multiannual plan devoted three lines to its statement that gender was a cross-cutting issue. The one after that did not refer to gender at all. Gender was not a prominent issue in directly or indirectly Dutch-funded projects either, although PISP included a gender action plan. With funding

from the Nuffic³² Netherlands Initiative for Capacity Development in Higher Education (NICHE), the international Gender and Water Alliance undertook week-long training of trainers courses on IWRM in 2013 and 2014. They were held at the Ministry of Public Works and Housing training institute. It turned out that there was not enough funding for the planned gender policy brief (GWA, 2015, p. 20). The PISP project was reported to have made slow progress in women's empowerment (ADB, 2016, pp. 21-22). WISMP I was reported not to have implemented the recommendations of its MTR to mainstream issues of gender and the poorest groups (World Bank, 2014, np³³).

In **Mali**, the MTR of the PASARC project (Baltissen et al., 2016) reported strong female participation in project activities, notably market gardening, but pointed out common failings in the project's gender approach: equating gender with women and (less common) conflating the interests of, and support to, women and youth. Women's activities and incomes were given more attention than their social empowerment and the root causes of gender inequality (Baltissen et al., 2016, pp. 41-45). Similar progress and challenges were reported by the MTR of PADIN II, which pointed out that 'non-discrimination is not enough... PADIN supports women in their traditional occupations (joint enterprises, market gardening, micro credit) but does not put emphasis on creating opportunities for women to exploit the project's other opportunities to increase their revenues' (Nelen et al., 2017, pp. 37-38).

Poverty reduction

Poverty reduction remained an overarching policy objective. The policy letter of 2012 reconfirmed the focus on improving the position of the poor population (MFA, 2012, p. 8). A major part of the water management project portfolio under review was designed for and implemented in poor and vulnerable areas, or included such areas. Most project designs did not include a specific pro-poor or inclusive development focus.

In water management in agriculture projects it was assumed that all farmers would profit equally from the intervention, which was generally the case for flood protection and dredging of canals. However, it was more difficult to increase the influence of the poor over priorities for maintenance and over the management of water in the system (irrigation water rotations, water level). Although it is not easy to prove, influential farmers still dominated decision making on water management in many cases, often at the expense of poor farmers. The poorest groups, including women, did often gain some economic benefit through employment for labour on irrigation infrastructure building, rehabilitation or maintenance, as was commonly arranged in **Bangladesh**.

In earlier support to the OdN irrigation scheme in **Mali**, the Netherlands achieved major benefits for the very poor peasant producers on the scheme, empowering them and raising their standards of living. During the review period, however, little further progress was made as support shifted from the field to institutional reform and development of the OdN. Dutch support did continue to assist lower income groups and women beneficiaries in the inland delta of the Niger – although, as in most rural societies, the poorest groups and

³² The Dutch organisation for internationalisation in education (https://www.nuffic.nl/en).

³³ No page number.

communities were not best placed to exploit the opportunities of a community-based planning approach, which tends to favour more advantaged communities.

In **Indonesia**, poverty reduction and the interests of the poorest groups were not the most prominent concern in Dutch support to water resource management; they were more directly targeted by funding for drinking water and sanitation programmes in poorer parts of the country. PISP, however, did aim to reduce poverty among its beneficiaries by one third. While the ADB's assessment was that the project more than achieved this target (ADB, 2016, p. 21), the IOB impact evaluation found no difference in income between project and control farmers (Schenk & Heun, 2017, p. 45). The issue of other potential causes of poverty reduction was implicit in the World Bank's comment that 'a decline in poverty in project districts [which was recorded in some WISMP I areas] is inadequate evidence that the decline was attributable to increased crop productivity in project areas' (World Bank, 2014, np).

The interests of the poorest groups were a significant issue in debates about water safety initiatives for Jakarta. Particularly when infrastructural development was directly linked in Dutch-funded planning to private sector investment – mostly in high-value property development for commercial and residential use on Dubai-style islands that would attract the opposite end of the income spectrum – these initiatives were vulnerable to accusations that they lacked the socially and politically necessary focus on the poorest groups, even though the intention of this approach was to raise private finance for the infrastructure, enabling government to use public funds for other purposes. If eventually implemented, a comprehensive water safety programme for north Jakarta would mainly benefit the predominantly low-income population who live there. That potential benefit lies in the future.

In **Bangladesh**, much of the work in Dutch-funded projects to tackle gender issues was linked to efforts to benefit the poorest and most marginal sectors of rural society from enhanced water management. Sustained effectiveness in poverty reduction was uncertain. The very poor and landless were the target group for employment on water management infrastructure, and certainly enjoyed increased (but still very low) incomes in the short term as a result. The Char Development and Settlement Project (CDSP) achieved the strongest results for the very poor, because it was building new land tenure and livelihoods for them on a foundation of improved water management in the newly accreted chars of the south east (Alamgir, 2010, p. 20). Elsewhere, however genuine the commitment of Dutch-funded projects to help the marginalised and the poorest, the entrenched advantages of rural elites proved hard to shift. Informants during this evaluation mission repeatedly mentioned the frustrations of trying to optimise water management and related agricultural improvements while the best-resourced residents were failing to co-operate and local institutions were unable to influence their behaviour.

The **Mozambique** portfolio of Netherlands support to water management was the most 'upstream' of those assessed by this review's four country studies. Much of the assistance was channelled through and to government and parastatal institutions, partly using sector budget support mechanisms. While the rationale for this assistance was partly to help Mozambique alleviate the severe poverty of most of its citizens, direct interventions to achieve this through better water management were uncommon. The most direct linkage to poverty reduction was arguably the Beira master plan process, because it would help to protect low-income areas of the city from flooding. That benefit had not been fully achieved by the end of the review period.

The Dutch water sector

Section 1.2 above outlined the increasing Netherlands government policy focus on promoting the profile and the engagement of the Dutch water sector in its international support to water management. This commitment spread beyond developing countries (engagements with New York and New Orleans, for instance) and beyond MFA. Indeed, the MFA, although closely involved in this integrated policy effort, had a less dominant role in it than the MI&E. As explained above, the RVO and the Netherlands Water Partnership played an important part in fielding capacity from Dutch companies and knowledge institutions. Dutch water authorities also played an increasingly important part in Dutch support to water management in a number of developing countries. Overall, promotion of the Dutch water sector is thus one of the aspects of this policy review where it is necessary to look beyond the policy of the MFA. Rhyming reference to 'aid' and 'trade' risks oversimplifying Dutch policy rationale and motives, and could be misinterpreted as a growing enthusiasm for commercial benefit at the expense of development commitment – undermining the Netherlands' carefully developed image as 'trusted adviser' on water management. But there was a clear intention, as some partner countries moved into 'transitional' status (and potentially beyond), to replace the simple development assistance relationship with a broader, more diverse interface between the water management sectors in the Netherlands and other countries - through which, inter alia, there would be stronger commercial benefits for the Dutch economy.

Section 2.3 presents the MFA activities and other relevant Dutch government instruments that aimed to engage the Dutch sector, in particular the MFA funded Water OS programme and the MI&E-funded, RVO-administered programme Partners for Water (PvW). Section 3.5 below shows that the activities were largely effective in achieving immediate results, with modest results in achieving the intended higher level outcomes. They contributed to Dutch embassies' capacity to engage Dutch actors and help Dutch water sector agencies join forces, leading to some interesting partnerships and potentially viable solutions to practical water management problems in partner countries. Experience in the review's case study countries is summarised below. In three of these, Bangladesh, Indonesia and Mozambique, the bilateral relations were intended to be transitional from aid to trade and investment, against a background of decreasing Dutch development assistance.

Bangladesh was not an easy place for foreign firms to do business – especially those from distant commercial environments like the Netherlands, which may, inter alia, be concerned about the governance conditions for tenders and contracts. Nor were there many obvious commercial opportunities for the Dutch water sector in Bangladesh. Although technical collaboration between Dutch and Bangladeshi knowledge institutions continued in various fields, a three-year collaboration between the MFA and Nijenrode Business University to build the aid to trade agenda with Bangladesh achieved only limited results. The

opportunities for support through funds managed by RVO were limited. During the period under review, the reputation of Dutch water expertise, and of the knowledge institutions in the Netherlands that sustained it, continued to be strong. Outside the dredging sector, the most important commercial opportunities developed by the programme of aid to water management were for consultancy firms. Some informants believed that Dutch water consultants were doing more business in Bangladesh than ever before, despite the strong skills base that now existed within the country.

Two areas of inadequate co-ordination constrained the optimal promotion of Dutch expertise and capacity in Bangladesh water management. First, the growing number of mechanisms and instruments through which such expertise and capacity could be delivered from the Netherlands was reported by informants in Dhaka to confuse many stakeholders, in both countries. The exact structure of responsibility, roles and lines of communication was not defined clearly enough. Secondly, the ways in which Dutch expertise was combined with local capacity in Bangladesh sometimes confused both groups of stakeholders (for example in preparation of the BDP 2100), and in some cases proved unsatisfactory to most of them. Spanning both problems was the reality, as mentioned above, that – outside consulting and research – the Bangladesh water sector was not commercially attractive to its Dutch counterpart.

In **Indonesia**, the principal platform that Dutch policy established for the exchange of knowledge and skills in water management was the Joint Co-operation Programme. The JCP built on long-established technical co-operation between several Indonesian and Dutch knowledge institutions. The government of Indonesia also contributed to the funding of the JCP, as did the participating Netherlands agencies. At a more commercial level, the Netherlands was proactive in building roles for Dutch expertise in the water management planning challenges facing Jakarta, and achieved considerable success in this regard. Dutch water authorities played active roles, too – for example, in support to polder development and related institution building in the Banger polder of Semarang city.

Through the JCP, through various training programmes, through the ongoing engagement of various Dutch knowledge institutions and water authorities in a range of water management initiatives in Indonesia, and through the efforts of the embassy and the Netherlands Delegated Representative for Water, the Netherlands managed to maintain its respected and pre-eminent position as the partner of choice for Indonesia – whenever it could avoid being relegated by price factors. The Dutch water sector largely succeeded in the delicate task of proving its relevance and its value, despite the fact that its Asian competitors were so much cheaper and so much better resourced. Realism was necessary: the Netherlands is a small and distant country, with a lower gross domestic product than Indonesia. There was an important element of realism in the apparently successful manoeuvring that led to the three-way agreement to work with the Republic of Korea on further Jakarta water management planning and implementation. But there was no doubt that the Netherlands continued to punch far above its weight as a leading water management partner for Indonesia. In the more 'upstream' water management cooperation strategy that the Netherlands pursued in Mozambique, there was less opportunity to promote the potential roles of the Dutch water sector, at least in the early part of the review period. In support to water management in the city of Beira, however, the new modalities did find an opportunity to succeed. Dutch water authorities were also able to play a useful, if small-scale, role in support to the gradual development of the regional water authorities (ARAs – Administração Regional de Águas), and the Dutch water sector was deployed very usefully to help Mozambique respond to the flood disasters of 2013 and 2014 and to contribute to planning for water resources in the Zambezi valley (leading to cooperation with the Zambezi Valley Development Agency). Towards the end of the review period, Dutch support for the establishment of a Mozambique water sector platform began to achieve useful results, both for development of the sector in the country and for interface with the Dutch water sector.

Largely because of the unattractive commercial environment and the difficult security situation, broader involvement of the Dutch water sector made less progress in **Mali** than in the other case study countries covered by this policy review. The Netherlands was seen in more conventional terms as a strong donor with a good reputation in the water management sector – rather than a 'delta country' with a range of potential engagement and support modalities and multiple partnerships to offer. Because IWRM still did not have the political profile and priority in Mali that local conditions demanded (Figuères, 2016, p. 8), there was less opportunity for the Netherlands to stand out as the partner of first choice. With 'development' being only one of the three emphases of likely Dutch policy for Mali over the coming years (alongside 'defence' and 'diplomacy'), the Dutch profile in water management may not change greatly – unless, as some informants suggested, the urgent necessity of enhanced water management becomes more apparent to national leadership and a real political will to achieve IWRM emerges.

Policy assumed that the engagement of the Dutch water sector was relevant and could be effective for achieving the objectives of water management interventions while also developing Dutch trade and investment opportunities. This assumption was found to be partly true, with the progress and value of the strategy varying from country to country, according to local economic and institutional circumstances. So, too, was the policy assumption that Dutch expertise adds value and fills gaps in local knowledge and expertise. A related assumption was that Dutch and local expertise (along with other external expertise that may be available) are complementary and synergistic. Ideally, the whole should be more than the sum of its parts. The study found that in practice this was often not the case. Sometimes this was for organisational reasons: the various stakeholders' teams not all being set up as planned or composed to best mutual advantage. In other cases, it was because Dutch experts lacked the experience or the attitude to be able to collaborate constructively with local colleagues; or because Dutch expertise was provided when the same skills could actually be procured in country. The latter problems sometimes arose because local authorities' terms of service were unattractive to these national experts, who sought opportunities elsewhere.
Significant results were expected from partnering and piloting arrangements, involving Dutch expertise and private enterprises with modest Dutch government funding that would be complemented by other resources and investments to achieve larger-scale and/or post-pilot implementation. The review did not come across convincing evidence for such significant results. The MTR of the Sustainable Water Fund concluded that the current role of the private sector was overestimated and that involving the private sector and related revenue-based models in PPPs was challenging (Van Woersem et al., 2016, p. v). Beyond the direct scope of MFA policy, Partners for Water made a contribution in this regard. The programme was a useful tool, particularly the commissions component, for entrepreneurial development management – procuring additional inputs of expertise in complex planning processes, for example. It was less effective as seed money, starting small activities that would grow bigger with other resources – although it can be argued that it is in the nature of pilot work that not all of it will be replicated at scale.

In general, partner governments and other donors considered the Dutch water sector, including its Dutch government stakeholders, to be knowledgeable and reliable, if usually expensive and occasionally over-confident about its relevance and value. Predictably, there were cases where the Dutch sector did not adequately understand local water management conditions and failed to contribute effectively. There was sensitivity, too, when the Netherlands government was perceived to be pushing Dutch commercial interests too aggressively in what were still seen as primarily development contexts. Contributions by the broader Dutch water sector were primarily financed through donor funded projects. Also in the countries of Dutch bilateral transitional relations such as Indonesia and Vietnam, Dutch government (ODA) funding remained important for the Dutch water sector to stay visible in a dynamic and highly competitive environment, where, as noted above, other major donor countries such as Korea and Japan sometimes subsidised their commercial interests more directly.

3.5 Across water management themes

Introduction

As mentioned in chapter 2, approximately 22% of expenditures (EUR 193 million) over the review period was for activities that were in support of more than one of the thematic areas. The activities were categorised as 'Across Water Management'. Of these expenditures, close to 85% were funded from the central budget and concerned global, regional or multi-country activities. Chapter 2 distinguishes between support provided through the intergovernmental Global Water Partnership (GWP), through programmes of knowledge organisations, partnership programmes of Multilateral Development Banks (MDBs), and various RVO-administered activities engaging the Dutch water sector. The main expenditures were on the partnership programmes of the ADB and WB and on the RVO-administered Sustainable Water Fund.

Although the ToR for the review do not include evaluation questions on activities that were in support of more than one thematic area, some overall comments about the effectiveness and efficiency of this part of Dutch policy are offered in this section. Findings on these activities that pertain to a specific thematic area, such as water management in agriculture or the engagement of the Dutch water sector, are presented above in the relevant sections of this chapter.

The comments presented below are mainly derived from available evaluation reports on the centrally funded activities (covering 63% of expenditures). Annex 4 provides a more elaborate presentation of these findings for this group of activities.

Effectiveness

A finding across available evaluation reports is that the MFA global, regional and multicountry development assistance, through the (co-)funding of the GWP, knowledge organisations, partnership programmes of MDBs and the RVO-administered activities engaging the Dutch water sector, was mostly successful in achieving short-term outcomes. There were also various indications of cross- fertilisation of activities. However, demonstrating intended higher policy level outcomes such as sustained IWRM capacity building, actual problem solving and sustaining results, proved challenging.

Available evaluation reports on the GWP demonstrated success in the building of a broad multi-actor network, of IWRM awareness, knowledge, dialogue across networks and policy influencing; but less in the provision of effective guidance for IWRM implementation (Nilsson et al., p. iii). DGIS-UNESCO-IHE cooperation was found to have been relevant and to have achieved many small projects' objectives, with emphasis on promoting good quality education and research of partner organisations across the world (Krijnen et al., 2013, p. 7).³⁴ However, cohesion between projects was not sufficiently demonstrated, at the expense of transparency and accountability at outcome and impact level (Krijnen et al., 2013, p. 8). The UNDP capacity building in sustainable water initiative, CAP-NET, offered good quality training to thousands of people but with potential to be further enhanced with more emphasis on institutional and long-term capacity development, and on reaching policymakers, local stakeholders and other sectors (PEMconsult, 2014, p. 9). The facility of the Dutch Scientific Research Organisation (NWO/WOTRO), Urbanising Deltas of the World, subsidising research projects, was found to have much strength but also to face a challenge, as there might be a misalignment between its high ambitions and its reliance on PhD students who may not have the gravitas to effect large-scale change (COWATER, 2016, p. 2).

The **partnership programmes of MDBs** were found to have been very useful for task managers in allowing an increase in the quality of investment projects through expertise and innovation. The programmes were effective in influencing development of (I)WRM strategies and policies in countries (IDB), increasing the volume of technical assistance for instigating reform and capacity building, in influencing major amounts of new investments

(WB, ADB), in knowledge sharing and building of knowledge partnerships and expertise (WB, ADB). In the case of the WB programme, the contribution to the capacity of national stakeholders through the creation of plans, training and study tours was assessed as moderate and the programme's result chains were found to go too far in attributing impacts on WB project beneficiaries and poverty reduction (Universalia, 2017, p. v).

The available evaluation reports were also broadly positive about immediate results of the **RVO-administered activities engaging the Dutch water sector** in providing solutions to water problems; with modest results in achieving intended higher-level outcomes. Effectiveness of the **Water OS** programme, set up to support Dutch embassies' multi-annual water programming (MASPs) in partner countries with involvement of expertise from the Dutch water (similar to the interdepartmental programme *Water Mondiaal*), was found to be satisfactory for most result areas such as improving the MASPs, involving Dutch parties, gap filling and establishment of local structures and various activities of limited scope. In respect to the positioning of the Dutch water sector in the countries, results were found to be diverse and country-specific.

Although falling outside the scope of this review, the MI&E-funded, RVO-administered programme **Partners for Water** (PvW) is also referred to as it is intended to be instrumental in engaging the Dutch water sector in partner countries for development assistance. An evaluation of PvW Phase III was positive with respect to the joining of forces to improve the international position of the Dutch water sector. The report further stated that it is plausible that PvW, with different projects and activities, had contributed to offering solutions to world water problems. Impact at the highest outcome level, however, could not be determined for lack of a clear definition of 'world water problems' (Te Riele et al., 2016, p. 5). As also reported in section 3.4, the country studies provided further evidence for the finding that opportunities, appetite and (likely) success of activities engaging the Dutch water sector varied significantly depending on the conditions in specific countries.

A mid-term review of the **Sustainable Water Fund** (SWF), established in 2012 and administered by RVO, for the provision of subsidies for innovative projects of PPPs based on calls for proposals, provided a mixed picture. It reported that less than a third of the funded projects were in water management in agriculture and (sub) national water management, with a few promising projects but with some serious challenges. These challenges included usefully engaging the (Dutch) private sector in water management in agriculture and ensuring relevance in the local development context. (Further information on effectiveness and efficiency of some of the SWF activities is provided in sections 3.1 and 3.2 and Annex 4.)

An external review of the **Young Expert Programme** (YEP) found it to be an excellent way for young Dutch and local professional staff with high potential to build international experience. The programme provided 50% of the costs of employment abroad at a (Dutch) firm, NGO or water authority, together with training and coaching. By 2016, it had become active in 31 countries, involving 65 organisations (Spit et al., 2016, p. 66). The 2016 external review report found it harder to draw conclusions on the higher-level objective of setting up a long-term presence in several countries by supporting sustainable networks and realising new opportunities for the Dutch economy and development cooperation (Spit et al., 2016, p. 8). The report further stated that there was no clarity about job opportunities for alumni, given on the one hand the reduction in bilaterally funded projects and downsizing of organisations, especially of NGOs; and on the other hand, increasing job opportunities in Dutch-funded international organisations, with more water authorities and water companies having become active internationally (Spit et al., 2016, p. 67).

The four country case studies came across various positive indications of cross-fertilisation between centrally funded global, regional or multi-country activities in support of more than one thematic area and bilateral cooperation activities funded from budgets delegated to embassies. Examples are: (1) the many government staff members involved in bilateral projects who said that they had been trained by and/or involved in knowledge building workshops organised by knowledge institutions based in the Netherlands (in particular through UNESCO-IHE) and that they had benefited from study tours to the Netherlands organised with the assistance of Dutch organisations; (2) local research and networking organisations involved in bilateral projects who said they had benefited from centrally funded activities through knowledge exchange initiatives (e.g. in the framework of CAP-NET and the NWO/WOTRO Urbanising Deltas of the World programme); (3) Dutch knowledge institutions that stated that they had been contracted by MDBs for loan preparation services paid from Dutch co-funded partnership programmes, such as studies or technical advisory services; and (4) the combination with the PvW non-ODA funded instrument for transitional countries such as Indonesia, which helped to trigger interventions and facilitated relatively quick responses to evolving challenges and needs, so that additional expertise and resources could be deployed in the short term.

Concern is expressed across the country case study reports about the sustainability of results. The mainstreaming of projects, programmes and facilities in strategic partners' and target organisations' policy, funding and practices left room for improvement. The continuation of many activities depended heavily on funding by the MFA or by a small range of interested donors, including The Netherlands.

Efficiency

Not all available evaluation reports assessed efficiency, and those that did addressed different aspects of this evaluation criterion. Where they did assess efficiency, they were largely positive. For some activities the evaluation reports gave evidence of concerns hindering achievement of results: (1) unrealistically high ambitions for often small activities, with modest results resulting in difficulty in demonstrating (likely) success at higher levels of intended outcomes (UNESCO-IHE, CAPNET, NWO/WOTRO Urbanising Deltas of the World, MDB water partnership programmes); (2) limited funding for and involvement of local stakeholders undermining engagement (UNESCO-IHE, NWO/WOTRO); and (3) in some countries, challenges in the process of linking MFA-funded activities with RVO-administered instruments, leading to fragmentation of the overall development effort and a weakening of reporting and performance assessment.

The extent to which the centrally funded global, regional and multi-country activities were actively linked to activities funded from delegated budgets for bilateral cooperation, and to which embassies were even aware of centrally funded programmes and projects that were active in the respective countries, varied. In some cases, embassies were actively involved, as in the Water OS programme aiming at enhancing the capacity of embassies to engage the Dutch water sector. The country case studies came across examples of centrally funded projects in partner countries in which embassies had not been (actively) involved and of which the added value was perceived to be limited. This was either because the activities were found to be not viable as they did not sufficiently address country specific problems; and/ or because priority needs were not adequately embedded institutionally and in local processes. More broadly, there were complaints by embassies that these 'parachute projects' could cause embarrassment when the embassy had explained the limits on available funding to the partner government and significant extra money unexpectedly arrived through a new centrally funded initiative. Coordination was generally felt to have been inadequate.

3.6 Broader issues and discussion

One of the most prominent aspects of Dutch policy (transcending MFA policy) during the review period was the growing emphasis on the Dutch 'top sector water' and on broadening and strengthening the engagement of the **Dutch water sector** in water management collaboration with developing and transitional countries. Although aid policy was thereby subsumed in an interdepartmental Dutch policy effort to project and contribute Dutch strength in this sector, aid funding remained by far the largest source of money for the overall effort. The effectiveness of this emphasis on the Dutch water sector varied. There were in fact several types of engagement, with differential results according to local conditions.

Two phrases sum up the first mode of engagement: the development and use of soft power, and the building and exploitation of the role of trusted adviser. The two concepts overlap. Dutch soft power in this context concerns the country's image as a repository of water management knowledge and expertise, willing and able to work as a technical colleague that builds partners' capacity in the same directions. This soft power was already established, in some partner countries' view, at the start of the period reviewed here. Overall, Dutch policy was successful in reinforcing it: more than anything else, by continuing and expanding training opportunities for water management professionals in the Netherlands. NGO interactions also made a useful contribution. While east Asian nations might offer much more copious development finance and be able to build infrastructure in record time at lower cost, developing and transitional countries would still see the Netherlands as their principal source of collegiate advice and knowledge for this sector. The role of trusted adviser was thus part of this soft power: the image of being available in the long term, even in times of political or economic difficulty and when there are no immediate opportunities for substantive Dutch engagement. This role of honest broker and impartial adviser, best developed in Indonesia, had to be balanced with the

desire to create and/or exploit commercial opportunities for the Dutch private sector. This meant a subtle but honest presentation of the Netherlands' will to help, but also to profit. It proved to be possible. The results of this first mode of engagement for the Dutch water sector were largely intangible. Nevertheless, their importance should not be underestimated.

A second mode of engagement for the Dutch water sector was more purely commercial. Dutch policy, as reflected in several embassies' multiannual plans, appeared to envisage water management relations between the Netherlands and partner countries becoming almost entirely commercial in due course: sooner in transitional countries, (much) later in developing ones, where this was, nevertheless, the implicit ultimate objective. This was a simplistic view. The results were, predictably, mixed. In some countries, and not only very poor ones, the Dutch private sector did not see good prospects. Their appetite was limited by the perceived difficulty of doing business, by security fears or simply by the apparent lack of commercial opportunities. Elsewhere, the opportunities were more obvious; but Dutch firms normally had to contend with a significant price disadvantage, find ways of convincing clients that quality was more important than price, and avoid tenders that were assessed on price alone. The playing field was far from level, and in the absence of major development finance resources Dutch policy could do little to adjust it. Nevertheless, a combination of soft power and high technical standards did strengthen the commercial engagement of the Dutch water sector in some cases, and the development assistance portfolio combined with Partners for Water and other instruments enabled the Dutch consulting sector to remain active and profitable.

A third mode of engagement for the Dutch water sector was institutional, linking in some ways to the soft power mentioned above. The significant but not unlimited ability of Dutch water authorities to add value was discussed earlier. Intergovernmental framework agreements, such as the four-party memoranda of understanding between the Netherlands and Indonesia (and its counterpart in Myanmar), served a useful purpose, as did twinning arrangements like that between Rotterdam and Jakarta. Networking and partnership structures began to have some effect in stimulating commercial and professional interaction on water management, both within partner countries and between them and the Netherlands.

In all these modes of engagement for the Dutch water sector, it became apparent that realism and context specificity were vital. One size would not fit all. Too much emphasis on branding, with an apparent oversimplification of the 'product' on offer – notably through the urban deltas approach – would limit effectiveness. Commercial opportunities and appetite would vary widely. What would vary less, if carefully deployed, would be the value of soft power in steadily promoting and reinforcing the image of the Netherlands as a reliable technical and commercial partner.

At the end of the review period, **sustainability** remained a fundamental challenge to Dutch aid policy – and all Dutch policy – for support to water management. This review has repeatedly identified the 'build, neglect, repair' tendency that Dutch and partner authorities failed to recognise or tackle effectively. In many countries and many projects, there was insufficient evidence that infrastructure and institutions would be maintained in the medium to long term. Too often, there was still an instinctive expectation at community and government levels (including the Netherlands government, it would seem) that another round of development projects would somehow do better than the one before. As it becomes increasingly clear that the era of conventional development assistance is drawing to a close, the question of sustainability becomes more urgent. There are no obvious answers to it. This review concluded in some countries that unless and until the major national water management institutions are fundamentally reformed, restructured and re-motivated, the longer-term value of much of the Dutch support over the last 11 years is in doubt.

One response to this dilemma is to recall John Maynard Keynes' reminder that 'in the long run, we are all dead'. This review explored the balance between 'upstream' institutional development and 'downstream' field level projects in Dutch support. In some countries, programming rightly recognised that real change at local level depends on an effective transformation of institutional frameworks. In others, the vogue for sector budget support linked this view to an emphasis on working with national institutions in the water management sector and passing much of the funding through their systems. However well intentioned, much of this 'upstream' assistance had, at best, diffuse results. Institutions were not adequately transformed. Accountability was incomplete. Effectiveness was hard to prove and had to be doubted. In the long run, there was no real sign of progress. Policy therefore shifted, in some cases, to a new emphasis on practical implementation of improved water management efforts that would actually benefit people in the short to medium term. This implied a renewed commitment to water management in agriculture at field level. Large-scale engagement in water management infrastructure for urban deltas also fitted this strategy, offering a prospect of tangible results and livelihood benefits in less than the long run. The realistic, but arguably pessimistic, conclusion would be that Dutch policy has no choice but to maintain some degree of commitment to, and engagement with, national water management institutions, continuing the challenging task of trying to build their capacity and improve their effectiveness. At the same time, the best chance of meaningful results lies in support to practical enhancements in rural, urban and transboundary water management, provided stronger measures are taken to ensure sustainability at least in the medium term.

These arguments lead, finally, to questions about the apparent policy focus expressed by the International Water Ambition, constituting a sub-domain for the MFA aid policy and the framework for interdepartmental cooperation – on **urban deltas**. Those zones certainly pose major water management challenges to some of the Netherlands' partner countries, and offer important opportunities for valuable and profitable engagement by the Dutch water sector. The discussion above suggests reasons for maintaining a broader engagement, beyond the commitment to urban deltas' catchments and supply chains that the IWA does mention. The first reason is that Dutch soft power in water management can be beneficial (and profitable for the Netherlands) at a broader scale. Secondly, as a good global citizen, the Netherlands would wish to maintain a broader commitment to environmental

sustainability and poverty reduction than what it can express in urban deltas, important though those areas and their catchments are. Finally, although the Dutch private sector can mostly find its own way in foreign markets, there is a case for ongoing facilitation of its engagement in other sub-sectors of water management in developing and transitional countries. This would strengthen achievement of the mutually beneficial commercial engagement to which Dutch policy aspired by the end of the review period.

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4

Policy options for significantly less or more financial means (-/+ 20%)

4.1 Introduction

The Order on Periodic Evaluation and Policy Information (RPE) of 2015 prescribes that policy reviews contain one or more so-called '20% saving' options: different policy options and their impact in case a significantly lower budget is made available. In addition, a '20% topping up' can be explored. This chapter presents two '20% saving' as well as two '20% topping up' options. The chapter was written by the Inclusive Green Growth (IGG) Department of the Ministry of Foreign Affairs. IOB does not assume any responsibility for the text of this chapter.

This introduction first defines the baseline for the 20% scenarios, and then explores which of IOB's findings on performance can be used to characterise the scenarios. In addition, result projections are given which result from the broader shifts in policy announced in the 2017 Dutch Coalition Agreement, that are being elaborated in the new policy for aid, trade and investments (2018).

Baseline for budget increase or reduction

During the period 2006-2016, annual expenditure on improved water management averaged EUR 79 million per year. However, expenditure increased significantly after 2011. In the 2012-2016 period, central and delegated expenditures combined, averaged EUR 98 million per year. This was 54% higher than the average EUR 63 million per year in the 2006-2011 period.

In the 2018 budget for Foreign Trade and International Cooperation, total thematic funding for water is projected to stabilise at a level of EUR 194 million in the period 2019-2022. As requested by Parliament, 50% of this total amount will be allocated to improved water management and 50% to the other major sub-theme: water supply, sanitation and hygiene. This means EUR 97 million per year will be available for improved water management, approximately the same as in the period 2012-2016. A 20% change equals EUR 19 million per year. This brings the '20% savings' budget at EUR 78 million and the '20% topping' up at EUR 116 million per year.

Variables derived from the current IOB evaluation

For the purpose of the evaluation, IOB identified five *thematic categories* of water management:

- (i) water management in agriculture;
- (ii) (sub) national water management planning;
- (iii) transboundary water management;
- (iv) cross cutting priority themes in water management (gender, climate, governance); and
- (v) activities that combine elements of categories i-iv.

In practice, IGG lumps these five into three thematic categories to manage its portfolio for results:

- (a) improved water productivity in agriculture (25% target in interventions); (IOB category i)
- (b) (sub) national water planning and management and safe deltas; (IOB categories ii, iv and v)
- (c) transboundary water management; (IOB category iii).

IOB finds that in each thematic category, success was achieved in certain areas and challenges remain in others. Across the portfolio, IOB identifies the need to strike a better balance between tangible improvements in infrastructure and services on the one hand,

and in institutions and political commitment to ensure that these can be sustained long term on the other hand. But this finding applies to all thematic categories.

IOB finds that large centrally administered activities tend to fund multiple smaller projects across a range of countries. It also finds that coordination and synergy between such smaller projects and between these and delegated activities, is sub-optimal. Centrally administered programmes lead to more fragmentation, a larger burden of coordination and more sustainability challenges. This makes reducing the share of centrally administered funding a relevant variable in the formulation of 'savings' and 'topping up' scenarios. For preferential topping up of delegated programmes, absorption capacity at the embassies needs to be adressed specifically.

IOB's review of *geographical allocation* of funding concludes that around 34% of expenditure over the evaluation period was for activities in Africa, 31% in Asia, and 7% in Latin America. The remaining 28% of expenditure was labelled 'worldwide' (see figure 6). In practice, the allocations within the latter category are predominantly to Asia and Africa as well. This leads to an overall allocation of approximately 45% Africa, and at least 40% Asia. This focus on Africa and Asia will continue to guide IGG's allocation of funds. However, IOB's findings on geographical allocation of funds and realisation of results are not explicit enough to designate this as a relevant variable in the formulation of 'savings' and 'topping up' scenarios.

IOB's evaluation of *results* emphasises IGG's focus on quantity over quality. IOB points out that IGG's highly aggregated results reporting to Parliament is useful to account for what taxpayer money has achieved in the short term, but gives limited insight how sustainable results are in the long term. IOB also finds that the aggregated indicators have limited value to inform policy adjustment with a view to improving performance. IGG records better quantitative performance in countries with stronger institutions and more stable governance contexts, and in centrally administered programmes. IOB's findings on performance across countries and thematic categories, suggest that the quality (sustainability) of results of centrally administered programmes and in weaker governance contexts can be lower. The latter finding is used to project the consequences of the geographic shift towards more fragile regions in both the 20% savings and the 20% topping up scenario in the following sections. However, IOB's findings on results do not provide guidance when aiming for maximising of results as a variable in the 'saving' and 'topping up' scenarios.

Variables derived from the 2017 Coalition Agreement

The Coalition Agreement, concluded in October 2017 as a basis for the new Dutch government, sets the stage for thematic continuity in international cooperation and foreign trade, including water management. It does not project particular thematic shifts. Yet it *does* announce more geographical focus on North Africa and the Middle East, the Sahel and the Horn of Africa. More focus there, implies less focus elsewhere. The net effect will be that the portion of funding to these three regions will increase, at the expense of Latin America, South East Asia, and other parts of Africa. This geographic policy shift is a generic part of both the 'savings' and 'topping up' scenario. It is not a variable that defines any of the options.

4.2 Scenario 1: 20% budget decrease

This section presents two policy options for a situation where the Dutch government allocates structurally 20%, or EUR 19 million per year, less ODA to improved water management. The 20% reduction would be implemented gradually over a four year period, with the target budget of EUR 78 million per year reached in 2022.

IOB concludes that the portfolio under review was largely successful in achieving its various intended results in water management. But the policy faced challenges in ensuring appropriate institutional development and sustaining improvements at the relevant local, (sub) national and transboundary levels across thematic sub-categories. IOB – implicitly – calls for improvements in the Theory of Change, so as to improve the design of interventions, and plan for results more realistically. IOB also calls for a better balance between interventions that improve water management services and interventions that strengthen the institutions needed to sustain these. Finally, IOB flags that larger centrally administered programmes contribute to a proliferation of smaller project interventions across countries that may deliver short term quantitative results but face sustainability and coordination challenges.

The evaluation does not indicate how exclusive programming choices (thematic, geographic, intervention types) can improve effectiveness and/or efficiency. But its findings *do* suggest that central administered funding has particular coordination, fragmentation and sustainability challenges. Therefore, in one option the 20% cut is applied generically across central and delegated funding, whereas in the other option it targets central funding.

Scenario 1 considers two options for a 20% budget cut:

- 1. a generic 20% cut across centrally administered and delegated funding;
- 2. a differentiated cut where most of the budget reduction is absorbed at central level.

In both options, the gradual geographical shift, announced in the Coalition Agreement, towards more fragile countries in the Sahel, Horn of Africa and Middle East is incorporated. As IOB concluded that centrally administered activities generally lead to more fragmentation and increase the burden of coordination, a differentiated cut where most of the reduction is absorbed at central level, would be most obvious. However, as this will result in a larger impact on quantitative result, both options are presented.

Consequence of option 1 is a quantitative decrease in the Dutch contribution to the realisation of SDG 6 targets. The impact on current result projections is larger than 20%, because of the broader shift away from more stable towards more fragile regions. This shift is expected to reduce quantity and sustainability of results. Qualitatively, however, results in fragile countries have a higher political value. Relative to current result projections, by 2020:

- (i) the target of 25% improvement in water productivity will be achieved in 70-80% of projects in agricultural water management that currently receive Dutch funding;
- (ii) between 2 million and 2.4 million instead of 3 million people per year will benefit from better planning, financing and access to water services such as irrigation, better protection against floods or pollution, or resource protection for drinking water purposes;

(iii) only in 6 instead of 7 international river basins will Dutch support strengthen riparians' collaborative development of institutions to share, analyse and use water management information for decision making, and their collaborative development of infrastructure.

Consequence of option 2 is an increase in the Dutch contribution to the realisation of SDG 6 targets as well. The impact on quantitative result projections is smaller than in option 1 in the short term, as programmes administered at embassies tend to take more time to deliver results. These results however, tend to be more sustainable. The impact on results until 2022 is expected to be limited. It will be primarily after 2022 when the second option will pay out in terms of more sustainable results:

- (i) the target of 25% improvement in water productivity will be achieved in every agricultural water management activity that currently receives Dutch funding;
- (ii) around 3.3 million people instead of 3 million people per year will benefit from better planning, financing and access to water services, such as irrigation or better protection against floods or pollution;
- (iii) in 7 out of 7 international river basins Dutch support will continue to enable riparians' collaborative development of institutions to share, analyse and use water management information for decision making, and collaborative development of infrastructure.

Table 4.1 Options for 20% decrease (in EUR mln.)					
	2018	2019	2020	2021	2022
Improved water management, drinking water and sanitation (sbe 0620504/1040S04)		194	194	194	194
Improved water management (50%)	100	97	97	97	97
Funding delegated to embassies	50	49	49	49	49
Options:					
1. 20% cuts generic (delegated, central)		-2.5	-5	-7.5	-10
2. 20% cuts differentiated		-2,5	-3	-3.5	-3
Funding centrally administered	50	49	49	49	49
Options:					
3. 20% generic (delegated, central)		-2.5	-5	-7	-9
4. 20% cuts differentiated		-3	-7	-11	-16
Total budgetary cuts improved water management Absolute Percentage		-5 -5%	-10 -10%	-14.5 -15%	-19 -20%
Total water security budget	199	189	184	180	175
Sub-total improved water management budget (50%)	100	92	77	83	78

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4.3 Scenario 2: 20% budget increase

This section presents two policy options for a situation where the Dutch government allocates structurally 20%, or EUR 19 million per year, more ODA to improved water management. Like under scenario 1, the 20% increase would be implemented gradually over a four year period, with the target budget of EUR 116 million per year reached in 2022.

Scenario 2 considers two 20% budget increase options, similar to the saving options in scenario 1:

1. a generic 20% increase across centrally administered and delegated funding;

2. a differentiated increase where most of the extra budget is absorbed at de-central level.

In both options, the extra budget will be used primarily for improved water productivity in agriculture, and (sub) national water planning and management and safe deltas; not for transboundary water, where higher than current levels of funding may not necessarily lead to more results on the ground. In line with the 2017 Coalition Agreement, this scenario incorporates a gradual geographical shift towards more fragile countries in the Sahel, Horn of Africa and Middle East. It is important to realise that – while budget cuts can be executed quite rapidly – building good programmes at de-central level is a lengthy process.

Consequence of option 1 is an increase in the Dutch contribution to SDG 6 targets. The quantitative impact on current result projections is expected to be less than proportional to the budget increase. Like the 20% savings scenario, the broader shift to more fragile countries will reduce quantitative performance. But the political appreciation of results in fragile countries will be higher. Relative to current result projections for 2020:

- (i) the target of 25% improvement in water productivity will be achieved in every project in agricultural water management that currently receives Dutch funding;
- (ii) between 3.3 million and 3.6 million people per year instead of 3 million people per year will benefit from better planning, financing and access to water services such as irrigation, better protection against floods or pollution, or resource protection for drinking water purposes;
- (iii) in 7 out of 7 international river basins will Dutch support enable riparians' collaborative development of institutions to share, analyse and use water management information for decision making, and collaborative development of infrastructure.

Consequence of option 2 is an increase in the Dutch contribution to the realisation of SDG 6 targets as well. The impact on quantitative result projections is smaller than in option 1 in the short term, as programmes administered at embassies tend to take more time to deliver results. These results however, tend to be more sustainable. The impact on results until 2022 is expected to be limited. It will be primarily after 2022 when the second option will pay out in terms of more sustainable results:

 the target of 25% improvement in water productivity will be achieved in every agricultural water management activity that currently receives Dutch funding;

- (ii) around 3.3 million people instead of 3 million people per year will benefit from better planning, financing and access to water services such as irrigation or better protection against floods or pollution;
- (ii) in 7 out of 7 international river basins Dutch support will continue to enable riparians' collaborative development of institutions to share, analyse and use water management information for decision making, and collaborative development of infrastructure.

Table 4.2 Options for 20% increase (in EUR mln.)					
	2018	2019	2020	2021	2022
Improved water management, drinking water and sanitation (sbe 0620S04/1040S04)		194	194	194	194
Improved water management (50%)	100	97	97	97	97
Funding delegated to embassies		49	49	49	49
Options:					
1. 20% increase generic (delegated, central)		+2.5	+5	+7.5	+10
2. 20% increase differentiated		+2	+4	+8	+16
Funding centrally administered	50	49	49	49	49
Options:					
3. 20% increase generic (delegated, central)		+2.5	+5	+7	+9
4. 20% increase differentiated		+3	+6	+6.5	+3
Total budgetary increase water management Absolute Percentage		+5 +5%	+10 +10%	+14.5 +15%	+19 +20%
Total water security budget	199	199	204	208	213
Sub-total improved water management budget (50%)	100	102	107	111	116

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Annexes

Annex 1 Extracts from the terms of reference

1 Background and purpose

These terms of reference (ToR) pertain to the evaluation of the water management for development policy of the Dutch Ministry of Foreign Affairs (MFA, policy article 2.2). The Policy and Operations Evaluation Department (IOB) of the MFA has programmed this policy evaluation to be completed in 2017. The evaluation will focus on water management, which is part of the broader MFA Water for Development policy, next to drinking water supply and sanitation. The water management policy evaluation will cover a 10-year period, from 2006 to 2015. As from 2006, improved water management became a prominent part of the policy. The total budget for water related activities for this period is estimated to be around EUR 1,6 billion, of which on average 44% was spent on water management activities. The policy evaluation adheres to the government-wide regulation for periodic policy evaluation (RPE 2015).

The Netherlands has supported water programs and projects in the framework of development cooperation since the 1960s. The main thrust of water for development policy shifted from a predominantly technical and construction-oriented perspective (drinking water supply, irrigation and drainage) towards a more integrated one, focusing on environmental, social, economic, governance and institutional aspects. The shift is in line with views of the international community and reflects an expanding perception of problems, from water as a basic need and requirement for development to water as being at the core of sustainable development and under increasing demand as well as threat from unsustainable use, pollution, climate change and other forces (Rio +5, +10, +20, World Water fora, UN Agenda for Sustainable Development).

From 2006 onwards, the focus of the Dutch water management development policy has been on creating national and sub-national water resource management plans and stimulating improved trans-boundary water management in several countries and basins in Africa and Asia. The 2013 development policy note 'A world to gain: A new agenda for aid, trade and investment' confirms the priority for water, in line with the 'Water for Development' policy letter to the Dutch parliament of January 2012. The latter stipulates the focus to be on improved water management in agriculture, management of (trans-boundary) watersheds and safe delta's. The policy assigns a strong role to the Dutch water sector in pursuing and achieving policy objectives. The level of ambition in terms of allocated budget should be at least that of improved access to clean drinking water supply and sanitation.

The MFA Inclusive Green Growth Department (IGG) is the responsible policy department. The main policy instruments are programs delegated to Dutch embassies and centrally funded programs and projects of multilateral organisations, universities/knowledge centres, NGO's and Public Private Partnerships (PPPs). IGG works with thematic experts, including water experts attached to Dutch embassies. IGG works closely with the Ministry of Infrastructure and Environment (MI&E) in engaging Netherlands water sector partners in implementing the policy; and with the Netherlands Enterprise Agency (RVO) responsible for management of instruments that involve Dutch water sector partners in policy implementation.

The Policy and Operations Evaluation Department of the MFA (IOB) has taken up the policy evaluation in view of its relevance. Improved water management is not only in itself a priority for Dutch development cooperation, but is also expected to contribute to the MFA's development policy spearhead food security (policy article 2.1) and climate change (policy article 2.3). In addition, the policy is expected to contribute to Dutch trade and investment promotion (policy article 1.2). The policy evaluation complements other IOB studies, in particular the IOB policy evaluation of Dutch development support to drinking water supply and sanitation (IOB, 2012) and the on-going IOB policy evaluation of development support to food security.

Against this background, the purpose of the policy evaluation is to contribute to the accounting for the Water for Development policy as well as to learning, by description and analysis of policy implementation and results and assessment of its effectiveness and efficiency and by deriving possible issues, lessons and recommendations for future policy.

2 Expenditures

Total ODA expenditures in the period 2006-2015 amounted to EUR 1,595 million³⁵ of which EUR 700 million³⁶, or 44%, was for water management, and the remaining EUR 895 million, or 56%, was for drinking water supply and sanitation activities. Figure I.1 shows ODA expenditures for the two parts of the water budget per year for the relevant period. With the exception of 2011 and 2012, most years show expenditures which are roughly evenly distributed between water management and drinking water supply and sanitation.



Figure I.1 ODA expenditures on water management and drinking water and sanitation for the period 2006-2015

³⁵ This amount was retrieved from the MFA's activity management information system based on SBE's (sub management units) and CRS purpose codes (OECD-DAC) reported to be related to water, these are listed in annex 2.

³⁶ The distinction between water management and drinking water and sanitation is made based on SBE's and CRS purpose codes.

Figure 1.2 shows total delegated expenditures for the period for partner countries with a water program and for countries that are supported in the framework of *Water Mondiaal*. In these countries, 52% (EUR 823 million) of total water-related expenditures were made. The figure seems to indicate that countries with larger budgets tend to spend it equally on both water management and drinking water and sanitation, while other countries tend to focus on one of them.



Figure 1.2ODA expenditures on water management and drinking water and sanitation for the period2006-2015 by delegated budget holder

65% (EUR 1,041 million) of the total expenditures were delegated to the embassies; the remaining 35% (EUR 554 million) was spent centrally.

In addition to the support through funds delegated to embassies, water management activities in 16 countries were supported through centrally funded instruments, in particular ORIO, PPP 'Fund Sustainable Water' facility, DRIVE and other instruments mentioned, and an unknown number of countries via supported multilateral, other PPPs and NGO water management related activities.

155 water management activities were identified for which financial information has been retrieved. Total expenditures on the 155 activities amount to EUR 697 million. The 155 activities are divided into the three policy objectives and a category 'other', which comprises activities that could not directly be related to one of the policy objectives.

Figure I.3 shows that EUR 194 million of total expenditures of EUR 697 million are related to water productivity; EUR 114 million of expenditures involve the drafting or supporting of water management resource plans on a national or sub-national level, for a specific river

basin, delta or aquifer. A further EUR 70 million of the expenditures is spent on activities involving trans-boundary water management. In total, activities on these policy objectives cover 54% of the expenditures. The category other includes activities on which EUR 318 million, nearly 46%, of the budget, is spent.

Activities in this category more generally aim at capacity building or knowledge creation in the water sector or in the domain of climate change adaptation. Also, it contains activities whose exact destination is yet unknown; for example the PPP 'Fund Sustainable Water', where activities are selected based on a call for proposals procedure and not all funds have as yet been allocated. Therefore, the final amount spent on the major policy objectives is likely to be higher than 54% of total expenditures.



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Figure 1.3 ODA water management expenditures (in EUR) of 155 activities specified per policy objective

3 Evaluation scope, criteria and questions

Scope

The evaluation covers the section on improved water management of the MFA Foreign Aid and Trade policy article 2. The section pertains to ODA funded country programs and centrally funded activities of multilateral organisations, universities/knowledge centres, NGO's and public private partnerships (PPPs). In addition a small number of activities with a significant water management focus or component funded outside this policy article will be studied. As explained in chapter 3, 155 ODA-funded activities, 125 within and 30 outside the policy article, with a budget over EUR 1 million, amounting to a total of EUR 697 million, and ongoing or completed after 2007, were identified. The list of 155 activities with expenditures of more than EUR 1 million was used to select activities for more in-depth study, including field study. The year 2006 is taken as the beginning of the period covered (2006-2015) as from 2006 improved water management became a prominent part of MFA Water for Development policy. MI&E funded programs that aim to be instrumental to the MFA policy, in particular the programme Partners for Water (PvW) and *Water Mondiaal*, will be studied as well but the focus of the policy assessment will be on the performance of the MFA.

Criteria

The evaluation criterion *effectiveness* is defined as the achievement of the expected Water Management for Development policy outcomes. Over time the overall policy intervention logic largely remained the same, except for the role assigned to the Dutch water sector as from 2009 and the addition of the water productivity objective as from 2012. This policy change will be taken into account. Specific attention will be paid to the question if improvements in water management have come about while also issues of climate change, environment and other priority policy themes (e.g. food security) were captured; and if such improvements have come about while participation and benefits for lower income groups and women beneficiaries were maintained or improved. Sustainability is taken up as dimension of effectiveness, referring to the likelihood that actual and anticipated benefits will be resilient to risks beyond the assistance provided.

Efficiency refers to how optimally resources are converted into benefits, meaning minimising costs of resources and/or maximising outputs and outcomes for a given input while ensuring quality of results. For this evaluation, the criterion refers to the role of the MFA and embassies in promoting collaboration between concerned actors within government, within the Dutch water sector and in partner countries and complementarity and synergy between activities in order for the combined effect to be greater than the sum of the individual effects. For the policy objective on water productivity, the criterion further refers to cost of interventions compared to the number of beneficiaries and their benefits of increased water productivity; for water management to costs and duration of achieving key results compared to what was planned, such as with reference to water management information, agreed water management plans and institutional arrangements, taking into account quality of results.

For the *learning purpose* of the policy evaluation, the study will endeavour to capture experience based policy lessons or understandings and issues that arose over the period covered. Specific topics of interests include the forms of MFA support/funding proven to be most relevant; the working of interventions and approaches; integration with land use planning; in country and cross border social, institutional and other factors affecting results; PPPs; the (potential) role of the Dutch water sector; innovations of delta areas as focus of Dutch expertise; issues in (financial) monitoring and if these differed between implementing agents.

Evaluation questions

The main evaluation question is:

What has been the contribution of the Dutch MFA to water management in developing countries in the period 2006-2015?

The main question will be answered through sets of sub questions. The first set of questions contains descriptive questions that pertain to the policy cycle (what happened?). This is followed by sets of questions clustered around the two evaluation criteria. The findings from the different sets of questions will inform the evaluative conclusions.

The key questions are:

Policy cycle

- 1. Why is water management in developing countries considered to be in need of international assistance and why did the MFA decide to take up the responsibility of improving it?
- 2. What have been the MFA expenditures by year and in total by policy objective, partner country, targeted geographic area, channel, within and outside the policy article. What proportion was spent on Dutch water sector contracts by year and in total?
- 3. In what way was the policy implemented (government institutional setting, nature and interconnection of instruments, changes in orientation and instruments and why)?
- 4. Did the policy to engage the Dutch water sector manifest itself in new policy mechanisms; what was been done to ensure demand-driven engagement?
- 5. What has been the approach to monitoring and evaluation of development results? What evaluations are available and which experience based policy lessons and issues have been reported?

Effectiveness Water productivity

- 6. Did MFA support contribute to sufficient quality and quantity of water at the right time available to farmers and to an improved relation between the quantity of water used and agricultural production?
- 7. Did the MFA support contribute to an enabling environment for and capacity of Water User Associations (WUAs) for operation and maintenance (O&M) of water infrastructure in a participatory way, also to augment abilities of individual farmers to use representation, knowledge and skills to improve their access to water and on-farm (water) management?
- 8. Did farmers pay for WUA services provided and do WUAs transparently account for funds received and expenditures?

Effectiveness Water management plans

9. Did MFA support contribute to approved water management plans?

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- 10. Do the supported water management plans include principles of integrated development and management of water, stakeholder participation and transparency of processes, equitable development without compromising vital ecosystems?
- 11. Did MFA support contribute to strengthening of the enabling (political, institutional, information, water infrastructure and O&M) environment for actual implementation of the plans?
- 12. Have budgets for implementation of water management plans been allocated and are plans implemented?

Effectiveness Trans-boundary water management

- 13. Did MFA support contribute to strengthened institutional arrangements and formal agreements over trans-boundary water sharing, allocation and management between countries; do these take into account global norms for management of international water streams?
- 14. Did MFA support contribute to a strengthened enabling (political, institutional, water infrastructure development and O&M) environment for actual implementation of arrangements and agreements?
- 15. Have governments of riparian countries allocated budgets and/ or taken other measures to follow up and sustain arrangements and implementation of agreements, including joint monitoring?

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Effectiveness Cross-cutting

- 16. Have improvements in water management come about while also issues of environment, climate change and/or other priority policy themes were addressed?
- 17. Have improvements come about while maintaining or improving water management benefits for lower income groups and women beneficiaries? In how many layers of decision making are these groups represented?
- 18. Have there been reported positive and/ or negative side effects?

Efficiency

- 19. Was the MFA able to fulfil its role as expert, broker and diplomat in enhancing collaboration between concerned actors within the Dutch government, the Netherlands and within partner countries, and enhance complementarity and synergy of activities?
- 20. Has the involvement of the Dutch water sector led to information, knowledge and technologies that are relevant and practical for intended beneficiaries to use? Has it leveraged efforts of concerned donors, policy and/or implementing agencies?
- 21. For the water productivity objective: what have been the costs of supported activities compared to the number of beneficiaries and their water productivity and agricultural production benefits?
- 22. For water management: what have been costs and duration of achieving key results compared to what the original planning, with reference to information (systems), water management plans, arrangements and agreements, taking into account quality of results.

Policy options37

- 23. What options are available to increase efficiency and effectiveness?
- 24. What options are available to decrease the budget with 20%?

The research questions are formulated in such a way that they are in line with the questions formulated in the RPE 2015. The way in which the RPE-questions are covered by the research questions is listed below.

RPE-questions Part 1, questions 1a and b about which (part of the) article is evaluated and when the other parts will be evaluated is answered in these ToR in the introduction and chapter 5.

Part 2, questions 2 a and b on motivation for the policy and responsibility of the MFA is addressed through question 1 and 3 in the ToR.

Part 3, questions 3a, b and c on description of the policy fields and expenditure are addressed in questions 2, 3 and 4.

Part 4 on available evaluations is taken up in question 5.

Part 5 on policy effectiveness and efficiency is taken up questions 6-22 in the ToR.

Part 6 on measures to enhance policy effectiveness and efficiency is taken up as question 23.

Part 7 on options for significant decrease of budget is taken up as question 24.

4 Methodology

The policy Theory of Change will be a key reference for the evaluation and the evaluation questions will steer systematic data collection from different sources.

The following figure (I.4) pictures the MFA's policy Theory of Change for support to water management for development in partner countries. The policy broadly covers the policy including the link to Dutch trade and climate change agenda as from 2009 and the addition of the water productivity objective in agriculture as from 2012.

³⁷ An attempt to answer these questions will be made based on the findings of the policy evaluation by the responsible policy department(s).

Figure I.4 Theory of Change watershed management



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Table I.2, the evaluation matrix, shows for each question the information sources and for questions related to the evaluation criteria indicators that provide a further reference for data collection and analysis. At programme and project level, the respective results frameworks will serve as point of reference for further identification of indicators.

The approach to information gathering and analysis will be both top down (from policy objectives to budgets, to instruments and reported results) as well as bottom up from targeted water shed areas and partner country contexts to the specific MFA engagement and interventions and results. The information gathering will to a great extent be through review of available documentation, supplemented by interviews of informants from the range of stakeholders in the Netherlands and in developing partner countries as well as from multilateral and other partners. For the MFA-supported water management programmes in the three countries that received most funding, Bangladesh, Indonesia and Mozambique, and for a selection of major activities, further supplementary interviews of stakeholders and qualitative field research is envisaged. Triangulation will be applied, meaning using different information sources and collection methods to arrive at a wide breadth of information, analyse evidence carefully and base findings on information that is validated from multiple sources.

5 Stakeholders, planning and deliverables

The identified primary stakeholders for this policy evaluation are:

- Dutch Ministry of Foreign Affairs, Inclusive Green Growth policy division;
- Dutch Ministry of Infrastructure and Environment;
- Netherlands embassies in partner countries selected for water management support;
- Netherlands Enterprise Agency, Netherlands Water Partnership;
- Concerned authorities, other donors, executing and implementing agencies in countries selected for policy relevance, effectiveness and efficiency analysis.
- Targeted final beneficiaries.

The MFA's policy department and water experts of embassies for partner countries will be asked to comment on the draft ToR and reports for the policy evaluation. For the qualitative study of country programs and selected activities, the concerned embassies and country authorities will be asked to comment on the ToR. A reference group composed of stakeholders' representatives and external experts will be established to comment and advise IOB on the evaluation design and draft reports.

Table I.1 Planning of the policy evaluation			
When	What	By whom	
Nov-Dec 2015	 Constitution of reference group; Consultation of peer reviewers, reference group, MFA water experts, MinFin on draft ToR; Finalisation of ToR; Collection of evaluation reports; Start of information gathering by country, targeted geographic area based on available information sources. 	IOB	
Jan-Feb 2016	 Preparing and tendering ToR qualitative field study of country programs and activities Bangladesh, Indonesia and Mozambique; Consultation of embassies and authorities; Ongoing information gathering and analysis. 	IOB	
Feb-Mar 2016	 Selection and contracting consultants for three qualitative field studies; Determining quality proposals consultants; Contracting consultants for studies. 	IOB	
Apr 2016	 Inception phase for consultants and finalisation of ToR for each of the three country programs and case studies; Determining contents qualitative studies based on: ToC and evaluation questions/ToR; Embassies' MASPs, interventions, reports; Consultation of stakeholders. 	Consultants, IOB	
Apr-Dec 2016	 Conducting of three field studies Bangladesh, Indonesia and Mozambique: Document review, interviews/FGD's range of stakeholders; Writing reports. Study of further 5 selected activities for more in-depth study based on available documentation and interviews. 	Consultants, IOB IOB	
Jun-Dec 2016	 Further document and data review including documents on category 'other activities', financial data, evaluation reports; Supplementary interviews of range of stakeholders within Dutch Government, the Netherlands and abroad; Writing of chapter on descriptive questions related to policy cycle. 	ЮВ	
Jan-Jun 2017	 Writing final report; Soliciting and addressing comments of peer reviewers, reference group, MFA water experts, other key stakeholders. 	IOB	

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Deliverables

IOB is responsible for delivering the following reports:

- Two reports, one per project, on quantitative impact studies: Blue Gold, Bangladesh; and Participative Sector Irrigation Project, Indonesia (ongoing studies partly contracted to consultants);
- Three reports, one per country, on qualitative evaluation of selected partner country programs and activities: Bangladesh, Indonesia and Mozambique;
- Synthesis report on evaluation of MFA Water Management for Development Policy.

The three qualitative field studies of country programs will be contracted to an independent consultant with a mix of thematic and evaluation expertise. IOB will join the consultant's mission to at least one of the selected countries to help ensure consistency between the sub studies and focus as per the ToR for the policy evaluation. The specific ToR by country for the qualitative field study of country programs will be detailed by the consultant in line with the ToR for the policy evaluation with and subject to approval of IOB.

Table I.2 Evaluation matrix			
Evaluation questions	Specific topics/ indicators	Information sources	
Policy cycle			
1.Why is water management in developing countries considered to be in need of international assistance and why did the MFA decide to take up the responsibility of improving it?		Literature, MFA policy documents, explanatory memorandum (EM) to MFA budgets	
2. What have been the MFA expenditures by year and in total by policy objective, partner country, targeted geographic area, channel, within and outside the policy article. What proportion was spent on Dutch water sector contracts by year and in total?		Piramide, EM to MFA budgets, RVO data	
3. In what way was the policy implemented (institutional setting, nature and interconnection of instruments, changes in orientation)?		Policy documents, appraisal documents, interviews with involved stakeholders including: IGG, MI&E, RVO, embassies, implementing agents in the Netherlands and partner countries	
4. Did the policy to engage the Dutch water sector manifest itself in new policy mechanisms; what was done to ensure demand-driven engagement?		Interviews including: IGG, MI&E, other ministries, RVO, Dutch water sector informants, embassies	

Table I.2 Evaluation matrix				
Evaluation questions	Specific topics/ indicators	Information sources		
5. What has been the approach to monitoring and evaluation? What evaluations are available and what policy lessons and issues have been reported?	Specific topics of interest for lessons learning include the forms of MFA support/funding proven to be most relevant; the working of interventions and approaches; in country and cross border social, institutional and other factors affecting results; integration with land use planning; PPPs; the (potential) role of the Dutch water sector; innovations of delta areas as focus of Dutch expertise; issues in (financial) monitoring and if these differed between implementing agents.	Evaluation reports, policy level results reporting, MASPs, annual reports, interviews including: IGG, RVO, embassies, water experts interviews of range of stakeholders within the government, Dutch water sector, partner countries		
Water productivity				
6. Did the MFA support contribute to quality and quantity and right time of water availability to farmers; and increase in agricultural productivity per m ³ of water?	Number of beneficiary farmers (m/f); increase in quality and quantity and right timing of water availability; increase in agricultural yield per m ³ of water	Appraisal documents, evaluation reports, impact studies, interviews including implementing agents, farmers (m/f)		
7. Did the MFA support contribute to Water User Associations (WUAs) capacity to provide sustained operation and maintenance (O&M) for water infrastructure in a participatory way, also to augment ability of individual farmers to use new representation, knowledge and skills to improve access to water and their on-farm (water) management	Changes in WUA management (technical, social/political, financial); in service delivery for works and O&M, including capacity to commission work and ensure effective execution; handing over of responsibility to WUAs; use of knowledge and skills by individual farmers; availability and use of WUA funds	Appraisal documents, evaluation reports, impact studies, WUAs records, interviews including WUAs and farmers (m/f)		
8. Did farmers pay for services and do WUAs transparently account for funds receipts and expenditures?		WUAs records, interviews including WUAs and farmers (m/f), impact studies		
Water management plans				
9. Did MFA support contribute to approved water management plans?	Approved wm-plans; wm-plan reviews taken place at different levels; quality of plans (independent expert assessment)	wm-plans, evaluations, interviews with involved stakeholders including embassies, executing actors, authorities and other stakeholders in concerned country.		

Table I.2 Evaluation matrix		
Evaluation questions	Specific topics/ indicators	Information sources
10. Do the supported water management plans include global principles of integrated development and management of water, stakeholder participation and transparency of processes, equitable development, without compromising vital ecosystems?	Range of stakeholders involved at different levels; involvement of other Ministries outside water; information sharing	wm-plans, evaluations, interviews with relevant stakeholders including: embassies, executing actor, authorities and other (m/f) stakeholders in concerned country.
11. Did MFA support contribute to the strengthening of the enabling (political, institutional, information, water infrastructure) environment for actual implementation of the plans?	Defined and accepted institutional arrangements; delegation of decision making and funding for multi-level actions; strategic working between international funders, PPPs, NGO's, embedded planning capability; information provision; water infrastructure developed including O&M	Documentation on arrangements and procedures, evaluations, interviews with involved stakeholders including: embassies, executing and implementing actors, authorities and other stakeholders in concerned country.
12. Have budgets for implementation of water management plans been allocated and are plans implemented?	Inclusion of plans in government's budgets, policy documents, implementation plans; progress in achievement of wm-plan results	Policy and budget documents, evaluations, interviews including: embassies, authorities, executing actors and other stakeholders in receiving country.
Transboundary water managem	ent	
13. Did MFA support contribute to strengthened arrangements and formal agreements over trans-boundary water sharing, allocation, conservation and management between countries; do these take into account global norms for international water streams?	Defined and accepted trans-boundary policy and regulation; allocation and conservation rules and water rights; enforcement water rules and conflict arbitration	Appraisal documents, evaluations, interviews of concerned water experts, responsible water authorities and (m/f) user groupings within the watershed including farmers, industry, fishermen, informants on ecosystem; and involved politicians from riparian countries.
14. Did MFA support contribute to the strengthening of the enabling (political, institutional, information, water infrastructure) environment for actual realisation of arrangements and agreements?	Defined and accepted institutional arrangement; strategic working between international funders, NGO's, PPPs; information provision; infrastructure development including O&M	Appraisal documents, evaluations, interviews with relevant stakeholders including: embassies, executing actor, water authorities, other key stakeholders in riparian countries
15. Have concerned governments allocated budgets and/or taken other measures to follow up and sustain arrangements and implementation of agreements, including joint monitoring?	Inclusion in riparian countries' policies and budgets; implementation plans; joint monitoring of follow up	Appraisal documents, evaluations, interviews with relevant stakeholders including: embassies, executing actor, water authorities and other key stakeholders in riparian countries

Table I.2 Evaluation matrix		
Evaluation questions	Specific topics/ indicators	Information sources
Cross-cutting		
16. Have improvements in water management come about while also issues of climate change, environment or other priority policy objectives were captured?	Environmental assessments; reported 'win win' results	Appraisal documents, result fiches, evaluation reports, impact studies, interviews including IGG, embassies, donor partners, Dutch water sector and other implementing agencies, recipient stakeholders
17. Have improvements come about while maintaining or improving water management benefits for lower income groups and women beneficiaries? In how many layers of decision making are these groups represented?	Social and gender specific results reporting; participation in project structures and WUAs	activity documentation, result fiches, evaluation reports, interviews including IGG, embassies, donor partners, Dutch water sector and other implementing agencies
18. Have there been reported positive and/ or negative side effects?	Reported side effects	Appraisal documents, evaluation reports, impact studies, interviews including IGG, embassies, donor partners, Dutch water sector actors and other implementing agencies
Efficiency		
19. Was MFA able to fulfil its role as expert, broker and diplomat in enhancing collaboration between concerned actors within the Dutch Government, the Netherlands water sector and partner countries and complementarity and synergy between activities?	Reported forms of collaboration, complementarities, synergies and MFA contribution	interviews MFA water experts and informants from the range of stakeholders, including MI&E, RVO, concerned water sector actors, stakeholders in partner countries
20. Has involvement of the Dutch water sector led to information, knowledge and technologies practical to the use of beneficiaries and has it leveraged efforts of other donors, governments and implementing agencies?	Use and stakeholders' appreciation of specific Dutch water sector inputs; follow up policies and/or investments by concerned stakeholders	Evaluation reports, interviews including RVO, Dutch water sector informants, embassies, partner country stakeholders, donor partners
21. For the water productivity objective: what have been the costs of supported activities compared to the number of beneficiaries and their water productivity and agricultural production benefits?	Costs of interventions compared to number of beneficiary farmers and their benefits	Progress reports, evaluation reports, impact studies
Table I.2 Evaluation matrix		
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Evaluation questions	Specific topics/ indicators	Information sources
22. For water management plans: have the cost and duration of key results achievement been as planned, taking into account the quality of these results?	cost of interventions compared to planned duration of key results achievement compared to planning	appraisal memoranda, evaluation reports, interviews of MFA water experts, field studies in three selected countries including interviews implementing agents
Policy options		
23. What options are available to increase efficiency and effectiveness?		Study findings, interviews including IGG, MI&E, embassies
24. What options are available to decrease budget with 20%?		Study findings, interviews including IGG, MI&E, embassies

Annex 2 List of activities

Act. no.	Policy theme	SBE*	CRS code	Budget- holder	Activity title	MFA relation	Budget (EUR)	Expenditures 2006-2016 (EUR)	Start	End
3237	WMAg	1040508	31140	DDE	A Comprehensive Assessment of Water Management in Agriculture	International Water Management Institute	6.993.464	328.984	01-04-2002	31-12-2009
7093	WMAg	0620504	31110	DML	Smallholder System Innovations in Integrated Watershed Management	IHE Delft Institute for Water Education	270.000	118.115	01-07-2003	31-12-2009
9025	WMAg	0620504	14010	DML	Input WWF in de Dialogue on Water, Food and the Environment	World Wildlife Fund International	1.215.926	371.158	01-01-2004	31-12-2008
18310	WMAg	0620504	31140	DME	Improved Capacity in Rainwater Management for Sustainable Development – Southern & Eastern Africa Rainwater Network Phase II	International Centre for Research in Agroforestry	518.593	518.594	01-07-2008	31-12-2012
24659	WMAg	1987500	31120	DME	Agricultural Smallholder Adaptation Programme	International Fund for Agricultural Development	40.000.000	40.000.000	01-11-2012	31-12-2017
25548	WMAg	0620504	43040	DME	Regional Program in the Sahel and Horn of Africa, enhancing Food and Water Security for Rural Economic Development	World Bank	42.574.405	22.478.415	01-08-2013	31-12-2019

Table II.1	Central	lly funded a	ctivities							
Act. no.	Policy theme	SBE*	CRS code	Budget- holder	Activity title	MFA relation	Budget (EUR)	Expenditures 2006-2016 (EUR)	Start	End
26393	WMAg	0620504	31140	DME	Water Grand Challenge: Securing Water for Food (SWFF)	United States Agency for International Development	6.360.000	3.575.540	01-01-2014	31-12-2019
27988	WMAg	0620504	14015	DME	FAO Remote Sensing to reduce Agricultural Water Productivity Gaps	Food and Agricul- ture Organisation	8.886.354	5.059.863	09-03-2015	31-12-2020
14636	(S)NWM	0620504	14010	DML	Technical Assistance Process Development for Preparing and Imple- menting Integrated Water Resources Management Plans	Asian Development Bank	814.617	814.617	01-08-2006	31-12-2011
18313	(S)NWM	0620504	14010	DME	Water and Nature Initiative (WANI) Phase II	International Union for the Conservation of Nature	4.527.663	4.527.664	01-11-2008	31-12-2014
11165	(S)NWM	0620504	14010	DME	A Programme for National IWRM and Water Efficiency Plans for 6 Countries in Africa	Global Water Partnership	6.303.085	3.853.085	01-01-2005	31-12-2011
27416	(S)NWM	0620504	14010	DME	Partners voor Water- Myanmar	Rijksdienst voor Ondernemend Nederland	3.099.486	1.136.621	01-01-2015	31-12-2019
25588	(S)NWM	0620504	14015	DME	Disaster Risk Reduction Team	Rijksdienst voor Ondernemend Nederland	2.500.000	2.500.000	01-06-2013	31-12-2017

Table II.1	Centra	lly funded a	ctivities							
Act. no.	Policy theme	SBE*	CRS code	Budget- holder	Activity title	MFA relation	Budget (EUR)	Expenditures 2006-2016 (EUR)	Start	End
8045	TWM	0620504	14010	DME	SADC-Hydrological Cycle Observing System (HYCOS) Phase II	Southern African Development Community	1.936.162	1.936.163	01-03-2003	31-12-2013
18484	TWM	0620504	14010	DME	Concertacion, Interdisciplinary Research and Capacity Building Program on Peasant and Indigenous Water Management and Water Policies in the Andes	Wageningen University	1.240.987	1.240.987	01-01-2008	31-12-2013
18485	Т₩М	0620504	14010	DME	Regional Capacity Building on Integrated Water Resource Management and Gender and Water in South Asia – Crossing Boundaries	Wageningen University	2.275.468	2.275.468	01-01-2008	31-12-2013
25285	TWM	0620504	14081	DME	MEDRC Trilateral Courses Desalination and Reuse	Middle East Desalination Research Centre	1.032.310	1.008.202	01-03-2013	31-12-2017
25865	тwм	0620504	31140	DME	Organisation pour la Mise en Valeur du Fleuve Sénégal Program Phase III	World Bank and OMVS	12.923.543	2.849.967	01-10-2013	31-12-2019
25925	TWM	0620504	43010	DME	Cooperation in International Water in Africa (CIWA)	World Bank	22.268.375	13.068.374	01-07-2013	31-12-2021

Table II.1	Centra	Illy funded a	ctivities							
Act. no.	Policy theme	SBE*	CRS code	Budget- holder	Activity title	MFA relation	Budget (EUR)	Expenditures 2006-2016 (EUR)	Start	End
5191 + 10994	TWM	1917500	24020	DVF	Nile Basin Initiative	World Bank	29.723.295	23.119.680	01-04-2003	30-06-2015
14376	ССРТ	0620511	14010	DME	Adapting to Climate Change at the Local Scale (ADAPTS)	Vrije Universiteit Amsterdam	1.924.780	1.924.780	01-09-2007	31-12-2012
24556	ССРТ	0620511	41020	DME	Least Developed Countries Fund for Climate Change (LDCF)	Global Environment Facility (WB as trustee)	45.000.000	45.000.000	01-09-2012	31-12-2017
3525	ССРТ	1040512	14010	DML	IUCN Water and Nature	International Union for the Conservation of Nature	13.809.361	6.427.377	01-07-2001	31-12-2012
7147	ССРТ	1911500	41030	DML	Poverty Reduction through Improved Natural Resource Management	World Wildlife Fund International	2.847.399	1.603.310	01-10-2003	31-12-2010
17226	ССРТ	0620512	41010	DME	Equitable Payments for Watershed Services – Phase II: Facilitating Service Delivery, a PPP Programme	World Wildlife Fund International	3.167.488	3.167.488	12-12-2007	31-12-2013
12522	ССРТ	1911500	14010	DME	Women for Water Partnership	Nederlandse Vrouwen Raad	2.576.708	2.296.708	01-12-2005	31-12-2012
12535	ССРТ	1911500	14010	DME	Gender and Water Alliance	Gender and Water Alliance Secretariat	3.250.000	2.975.000	01-12-2005	31-12-2012
9027	ССРТ	0620504	14010	DML	Water Law and Indigenous Rights (WALIR)	Wageningen University	637.870	263.870	01-01-2004	31-12-2009

Table II.1	Central	lly funded a	tivities							
Act. no.	Policy theme	SBE*	CRS code	Budget- holder	Activity title	MFA relation	Budget (EUR)	Expenditures 2006-2016 (EUR)	Start	End
14832	ССРТ	1040504	14010	DML	Water Integrity Network (WIN)	Transparency International	689.514	689.514	01-11-2006	31-12-2013
19779	ССРТ	1040504	14010	DME	Water Integrity Network (WIN) Phase II	Transparency International	599.807	599.807	01-01-2009	31-12-2013
25587	CCPT	0620504	14010	DME	OECD Network on Water Governance	Organisation for Economic Co-Operation and Development	20.000	20.000	01-07-2013	31-12-2016
26104	ССРТ	0620504	14010	DME	Transparency Internati- onal Supplemental Core 2013	Transparency International	400.000	400.000	04-12-2013	31-12-2016
27183	ССРТ	0620504	14010	DME	Water Integrity Network Strategy Implementa- tion 2014-2016 in 5 Countries	Water Integrity Network Association	2.000.000	1.803.929	01-07-2014	31-12-2017
3515	AWM	0620512	14010	DML	Additional Core Support to Global Water Partnership 2002	Global Water Partnership Organisation	7.315.000	2.250.000	01-01-2002	31-12-2010
19795	AWM	0620504	14010	DME	Global Water Partner- ship Core Funding	Global Water Partnership Organisation	1.900.000	1.900.000	01-01-2009	31-12-2012
23522	AWM	0620504	14010	DME	Global Water Partner- ship Strategy 2011- 2013	Global Water Partnership Organisation	5.600.000	5.600.000	01-01-2011	31-12-2017
26967	AWM	0620504	14010	DME	Core Contribution to Global Water Partner- ship 2014-2016	Global Water Partnership Organisation	3.500.000	3.500.000	01-01-2014	31-12-2017

Table II.1	Centra	lly funded a	ctivities							
Act. no.	Policy theme	SBE*	CRS code	Budget- holder	Activity title	MFA relation	Budget (EUR)	Expenditures 2006-2016 (EUR)	Start	End
9023	AWM	0620504	14081	DML	Partnership for Water Education (PWE)	IHE Delft Institute for Water Education	3.125.707	1.179.421	01-01-2004	31-12-2008
10385	AWM	1070500	43082	DCO	African Technology Policy Studies V Water and Environment	African Technology Policy Studies Network	1.312.202	676.902	01-06-2004	31-12-2009
11209	AWM	0620504	14010	DML	WATERMILL: Water Sector Capacity Building in Support of the MDGs	IHE Delft Institute for Water Education	2.300.000	1.530.000	01-10-2004	31-12-2009
11763	AWM	0620504	14010	DML	WaterNet Phase II	IHE Delft Institute for Water Education	2.399.926	1.499.926	01-04-2005	30-09-2010
13414	AWM	1070500	14010	DCO	Concertación, Interdisciplinary Research and Capacity Building Program on Peasant and Indigenous Water Management and Water Policies in the Andes	Wageningen University	1.180.220	1.180.220	01-01-2006	01-01-2012
14447	AWM	0620504	14010	DME	Cap-Net: Capacity Building in Water Management to achieve the MDGs Phase II	United Nations Development Programme	2.119.000	2.119.000	01-01-2006	31-12-2014
16645	AWM	0620512	31140	DML	Core Contribution to the International Water Management Institute (IWMI)	International Water Management Institute	1.064.785	1.064.785	01-01-2007	31-12-2011

Table II.1	Centra	Ily funded a	ctivities							
Act. no.	Policy theme	SBE*	CRS code	Budget- holder	Activity title	MFA relation	Budget (EUR)	Expenditures 2006-2016 (EUR)	Start	End
17133	AWM	0620504	14010	DME	Programme Support to UNESCO-IHE	IHE Delft Institute for Water Education	26.289.420	25.797.766	01-01-2008	31-12-2019
19774	AWM	0620510	31140	DME	Core Contribution to the International Water Management Institute (IWMI) 2009	International Water Management Institute	1.489.502	1.489.502	01-01-2009	31-12-2013
23436	AWM	0620504	14010	DME	Cap-Net Phase III: Capacity Building for Sustainable Develop- ment of Water Resources in a Context of Changing Climate	United Nations Development Programme	4.372.500	4.273.500	01-12-2011	31-12-2017
24709	AWM	0620504	14010	DME	Urbanising Deltas of the World	Nederlandse Organisatie voor Wetenschappelijk Onderzoek	4.868.000	2.381.910	01-10-2012	31-12-2022
28325	AWM	0620504	14081	DME	DGIS UNESCO-IHE Programmatic Cooperation (DUPC 2) 2016-2020	IHE Delft Institute for Water Education	24.145.000	4.400.000	01-12-2015	31-12-2021
9015	AWM	0620504	14010	DML	Improving the Performance of Water Resources Management in Latin America and the Caribbean	Inter-American Development Bank	5.994.754	2.025.140	01-01-2004	31-12-2014
10994	AWM	1917500	24020	DVF	Water Partnership Program Phase I 2009-2012	World Bank	10.565.199	10.565.199	01-01-2009	30-06-2012

Table II.1	Centra	lly funded a	ctivities							
Act. no.	Policy theme	SBE*	CRS code	Budget- holder	Activity title	MFA relation	Budget (EUR)	Expenditures 2006-2016 (EUR)	Start	End
15340	AWM	0620504	14020	DME	Water Financing Facility	Asian Development Bank	28.202.410	22.764.290	01-04-2007	31-12-2018
24790	AWM	0620504	16050	DME	Water Partnership Program Phase II 2012-2016	World Bank	14.000.000	14.000.000	01-07-2012	31-12-2018
23152	AWM	0620504	14010	DME	Intensivering Water OS DME 2011-2012	Rijksdienst voor Ondernemend Nederland	5.896.909	5.896.909	01-05-2011	30-06-2016
23710	AWM	0620504	14010	DME	Sustainable Water Fund I	NL EVD Internatio- naal (Rijksdienst voor Ondernemend Nederland)	54.077.120	24.357.662	01-01-2012	31-12-2024
23959	AWM	0620504	14010	DME	World Water Day 2012	Netherlands Water Partnership	20.000	20.000	23-03-2012	23-04-2012
24086	AWM	0620504	14010	DME	Support for the establishment of the Knowledge Platform Water	Royal Haskoning Nederland BV	58.786	58.786	09-04-2012	31-12-2013
25167	AWM	0620504	14081	DME	World Water Day 2013	Ministry of Foreign Affairs NL	505.870	505.870	01-01-2013	31-12-2014
25287	AWM	0620504	14081	DME	Young Expert Pro- gramme (YEP) Phase I	Netherlands Water Partnership	12.150.000	8.367.500	01-01-2013	31-12-2022
25312	AWM	0620504	14081	DME	World Water Day 2013: Water Footprint Film	Moon Pictures BV	90.052	90.052	01-02-2013	30-06-2013
26962	AWM	0620504	14010	DME	Aqua for All PPP Innovation Program	Aqua for All	20.000.000	8.230.000	10-10-2014	31-12-2019

Table II.1	Centra	lly funded a	tivities							
Act. no.	Policy theme	SBE*	CRS code	Budget- holder	Activity title	MFA relation	Budget (EUR)	Expenditures 2006-2016 (EUR)		End
27115	AWM	7015500	74010	DSH	Dutch Surge Support Facility Water	Rijksdienst voor Ondernemend Nederland	2.106.477	990.475	01-11-2014	31-12-2018
27641	AWM	0620504	14010	DME	Water en Ontwikkelings- samenwerking Phase III (Water-OS-3)	Rijksdienst voor Ondernemend Nederland	1.675.380	844.180	01-01-2015	31-12-2017

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Act. no.	Policy	SBE*	CRS	Budget	Activity title	MFA relation	Budget	Expenditures	Start	End
Act no.	theme		code	holder	Activity due		(EUR)	2006-2016 (EUR)	Start	
26	WMAg	0610515	31120	DHA	Small Scale Water Resources Sector Development Project (SSWRSDP) Phase II 2002-2008	Asian Development Bank	19.040.675	11.224.665	01-10-2001	31-12-2011
952	WMAg	0610513	31140	BAM	Amélioration de la Riziculture Paysanne à l'Office du Niger Phase IV (ARPON IV)	Direction Générale de l'Office du Niger	2.002.392	248.137	01-08-2002	31-12-2008
1038	WMAg	0610515	14010	KAI	Topping up of the Institutional Reform Unit (IRU) 2008-2012	Ministry of Water Resources and Irrigation	952.000	647.000	01-11-2002	30-06-2014
1735	WMAg	0610515	31140	JAK	Participatory Irrigation Sector Project (PISP)	Asian Development Bank	11.431.500	11.016.500	31-03-2003	31-12-2014
12687	WMAg	0610515	31140	BAM	Contrat Plan 2005- 2007 de l'Office du Niger	Office du Niger	5.798.953	4.503.136	01-09-2005	31-12-2010
12856	WMAg	0610515	31140	KAI	Integrated Irrigation Improvement and Management Project (IIIMP)	Ministry of Water Resources and Irrigation	10.721.167	10.306.166	01-11-2005	31-12-2014
13666	WMAg	0610515	31140	BAM	Niger Floodplains	Programme National d'Infrastructures Rurales	3.263.640	3.263.640	01-01-2006	31-12-2012
14136	WMAg	0610515	31140	KAI	Fayoum Water Users' Organisation Project	Euroconsult Mott MacDonald	2.486.015	2.486.016	15-12-2006	30-06-2012

Act. no.	Policy theme	SBE*	CRS code	Budget holder	Activity title	MFA relation	Budget (EUR)	Expenditures 2006-2016 (EUR)	Start	End
18442	WMAg	0610515	14010	BAM	Harmonisation et de l'Efficacité de la Gestion á l'Office du Niger (HELEN)	Office du Niger	2.872.923	2.872.924	01-09-2008	31-12-2016
18547	WMAg	0611502	14015	DHA	Emergency Disaster Damage Rehabilitation (Sector) Project (EDDRP)	Asian Development Bank	17.054.496	17.054.496	20-11-2008	31-12-2012
19010	WMAg	0610515	14010	BAM	Formulation Programme Aménagement Delta Intérieur du Niger (PADIN)	Direction National de Conservation de la Nature	412.163	412.163	17-11-2008	31-12-2011
19877	WMAg	0610515	31140	BAM	Formulation Programme Intérimaire Appui Contrat Plan Office du Niger 2008-2012	E-SUD Consulting SARL	21.660	21.660	01-05-2009	30-11-2009
20379	WMAg	0610515	31140	BAM	Programme d'Appui à l'Office du Niger pour l'Exécution du Contrat Plan 2008-2012 (PACOP)	Ministère des Affaires Etrangères et de la Coopération Internationale (MAECI)	4.815.865	4.771.840	01-10-2009	31-12-2017
22042	WMAg	0610515	14010	BAM	Appui au Budget du Programme d'Aménagement du Delta Intérieur du Niger (PADIN)	Cooperative for Assistance and Relief Everywhere International Nederland	5.997.433	5.997.433	01-12-2010	31-12-2014

Act. no.	Policy theme	SBE*	CRS code	Budget holder	Activity title	MFA relation	Budget (EUR)	Expenditures 2006-2016 (EUR)	Start	End
22294	WMAg	0611502	14010	ISL	Revitalising Irrigation in Pakistan (REVIP)	International Water Management Institute	2.663.391	2.663.391	26-11-2010	31-12-2015
22719	WMAg	0610515	14010	BAM	Technical Assistance for DEA	Huub Munstege	30.894	30.894	21-02-2011	31-12-2014
24007	WMAg	0611502	14040	DHA	Blue Gold, Program for Integrated Sustainable Economic Development by Improving the Water and Productive Sectors in Selected Polders	Government of Bangladesh Group	62.670.000	23.870.250	01-01-2012	31-12-2021
24634	WMAg	0611502	31140	DHA	Small Scale Irrigation Farmers Field School (FFS) in Polders (SSIP)	Food and Agriculture Organisation	2.209.500	2.209.500	01-07-2012	31-12-2016
24812	WMAg	0611502	41010	BAM	Inner Delta Food Security, Resilience and Agricultural Water Management Program (PASARC)	Near East Foundation	4.359.850	3.750.811	01-11-2012	31-12-2018
25437	WMAg	0611502	31161	JAK	Indonesia Irrigated Agriculture Sector Project (Preparation Phase)	Asian Development Bank	1.164.000	1.164.000	15-05-2013	31-12-2016
25501	WMAg	0611502	41050	BAM	Appui au Budget du Programme d'Aménagement du Delta Intérieur du Niger Phase II (PADIN II)	Cooperative for Assistance and Relief Everywhere au Mali	12.000.000	10.170.081	01-06-2013	31-12-2019

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Act no	Policy	SBE*	CRS	Budget	Activity title	MFA relation	Budget	Expenditures	Start	End
Act. no.	theme	SRE.	code	holder	Activity title	MPA relation	Eudget (EUR)	2006-2016 (EUR)	Start	ENG
25584	WMAg	0611502	14010	SAA	Open and Accessible Data Platform on Irrigation for Yemen	Alterra	954.210	824.843	01-11-2013	31-10-2017
25695	WMAg	0611502	14015	DHA	Satellite for Crops	Rijksdienst voor Ondernemend Nederland	160.153	160.153	01-08-2013	31-12-2016
25726	WMAg	0611502	43040	BAM	Programme de Renforcement des Chaînes de Valeur Agricoles pour la Sécurité Alimentaire (PRCA-SA)	NNB (appel d'offres)	8.000.000	2.969.700	01-01-2014	31-12-2020
26416	WMAg	0610513	31140	RAM	Agricultural Wells Rehabilitation in Area C (Fast-Track Permitting Package)	Food and Agriculture Organisation	1.957.440	1.957.440	01-05-2014	30-04-2017
26568	WMAg	0611502	14010	SAA	Sana'a Basin – Sustainable Water and Agriculture Development Project	Food and Agriculture Organisation – CO Yemen	4.230.578	2.346.487	15-07-2014	14-07-2017
27948	WMAg	0611502	14010	DHA	Additional Financing to South West Area Integrated Water Resources Planning and Management Project (SWAIWRPMP II)	Asian Development Bank	6.323.000	759.207	01-11-2015	30-06-2023
28428	WMAg	0611502	31140	JAK	Water Availability Main Irrigation Schemes (WAMI)	Stichting Deltares	225.000	150.000	01-02-2016	31-12-2017

Act. no.	Policy theme	SBE*	CRS code	Budget holder	Activity title	MFA relation	Budget (EUR)	Expenditures 2006-2016 (EUR)	Start	End
29007	WMAg	0611502	31140	NAI	Smart Water for Agriculture (SWA)	SNV	5.997.302	1.614.367	01-04-2016	31-12-2020
29078	WMAg	0611502	31140	MAP	Water Productivity	Ministry of Economy and Finance	1.561.057	1.561.057	01-07-2016	30-06-2018
51	(S)NWM	0610510	14010	DHA	Project Development Office – Integrated Coastal Zone Management: Integrated Coastal Resources Data Base	Economic Relations Division Bangladesh	314.937	245.979	01-02-2002	31-12-2008
57	(S)NWM	0611502	14040	DHA	Estuary Development Project (EDP)	Economic Relations Division Bangladesh	2.805.818	2.805.818	01-01-2005	31-12-2014
90	(S)NWM	0610515	14010	DHA	Water Management Improvement Project (WMIP)	World Bank	2.040.000	2.040.000	01-07-2004	31-12-2016
1036	(S)NWM	0610515	14010	KAI	Strengthening the Water Quality Management Unit in the Ministry of Water Resources and Irrigation	Ministry of Water Resources and Irrigation	2.751.983	938.983	01-01-2002	31-08-2010
1536	(S)NWM	0610515	14010	DHA	Integrated Planning for Sustainable Water Management (IPSWAM) Monitoring / Review	Saltet and Van de Putte	63.864	54.184	01-01-2003	31-12-2011
1948	(S)NWM	0610515	31140	HAN	Second Red River Basin Sector Project	Asian Development Bank	7.866.697	3.906.397	01-07-2002	31-12-2012

Table II.2	Delega	ted activitie	s							
Act. no.	Policy theme	SBE*	CRS code	Budget holder	Activity title	MFA relation	Budget (EUR)	Expenditures 2006-2016 (EUR)	Start	End
2263	(S)NWM	0610515	14010	JAK	Water Resources and Irrigation Sector Management Program (WISMP)	World Bank	10.894.683	9.649.683	01-06-2003	31-12-2013
9870	(S)NWM	0611502	14015	GUA	Manejo Indígena de Micro-Cuencas	Fundación Defensores de la Naturaleza	1.252.806	714.362	01-06-2004	31-12-2010
12281	(S)NWM	0611502	43040	DHA	Char Development and Settlement Project Phase III (CDSP III)	BRAC	1.457.118	1.277.355	01-07-2005	31-12-2011
12301	(S)NWM	0610515	14010	ВАМ	Programme National d'Infrastructures Rurales – Technical Assistance and Finance	Programme National d'Infrastructures Rurales	1.032.750	727.852	01-05-2004	31-12-2009
12644	(S)NWM	0611502	14015	GUA	Gestión Integrada de Ios Recursos Hídricos en la Cuenca Alta del Rio El Naranjo	Fundación Solar	1.814.478	1.514.478	01-10-2005	31-12-2010
12702	(S)NWM	0611502	43040	DHA	Char Development and Settlement Project Phase III (CDSP III) – Technical Assistance	Euroconsult Mott MacDonald	2.685.341	2.285.342	01-07-2005	31-12-2012
12853	(S)NWM	0610515	14010	KAI	National Water Resources Plan – Coordination Project (NWRP-CP)	Ministry of Water Resources and Irrigation	4.055.000	4.055.000	01-01-2007	30-06-2014

Table II.2	2 Delega	ted activitie	:5							
Act. no.	Policy theme	SBE*	CRS code	Budget holder	Activity title	MFA relation	Budget (EUR)	Expenditures 2006-2016 (EUR)	Start	End
12858	(S)NWM	0610515	31140	KAI	Water and Stability	Cooperative for Assistance and Relief Everywhere -Netherlands	1.244.939	1.004.323	12-12-2005	31-12-2010
12876	(S)NWM	0611502	43040	DHA	Char Development and Settlement Project Phase III (CDSP III) – Financial Assistance	Economic Relations Division Bangladesh	8.164.682	8.164.683	01-07-2005	31-12-2012
12915	(S)NWM	0610515	41050	JAK	JAK Aceh Nias Sea Defense, Flood Protection, Refuges and Early Warning Consultancy	DHV GROEP	9.007.907	9.007.908	01-01-2006	31-12-2010
13546	(S)NWM	0611502	14010	DHA	South West Area integrated Water Resources Planning and Management Project (SWAIWRPMP)	Asian Development Bank	9.627.080	9.627.080	01-04-2006	31-12-2016
13766	(S)NWM	0611502	14010	DHA	Financial Support to the Twinning Arrangement Phase 2 of the IWRM Sector	Ministry of Infrastructure and Environment	388.457	388.458	01-01-2006	31-12-2008
13968	(S)NWM	0610515	14015	HAN	Natural Disaster Risk Management Program (NDRMP)	World Bank	4.639.396	4.639.396	01-07-2006	31-12-2012
14208	(S)NWM	0611502	14015	GUA	Tacana Phase II	International Union for the Conservation of Nature	1.818.054	1.818.055	01-08-2006	31-12-2012

Table II.2	Delega	ted activitie	S							
Act. no.	Policy theme	SBE*	CRS code	Budget holder	Activity title	MFA relation	Budget (EUR)	Expenditures 2006-2016 (EUR)	Start	End
14468	(S)NWM	0611502	14015	GUA	Gobernabilidad Hídrica Chor'ti	ASORECH-Pro- Ambiental	3.252.113	3.252.114	01-08-2006	30-06-2013
14707	(S)NWM	0611502	14010	LAP	National Watershed Program	Ministerio del Agua Bolivia	13.299.884	13.299.884	21-08-2006	01-04-2014
14816	(S)NWM	0610515	14015	HAN	NDM Partnership phase II	Ministry of Agriculture and Rural Development Vietnam	116.300	116.300	31-08-2006	30-06-2009
15097	(S)NWM	0611502	14040	СОТ	Programme Pluriannuel d'Appui au Secteur de l'Eau et de l'Assainissement – Gestion Intégree des Ressources en Eau (PPEA BP/GIRE) 2007-2011	Ministère de l'Economie et des Finance	2.681.496	2.681.497	15-11-2006	31-12-2015
15702	(S)NWM	0611501	14010	JAK	Master Plan Ex Mega Rice Project Central Kalimantan (EMRP)	Euroconsult Mott MacDonald	1.982.396	1.982.396	01-01-2007	31-12-2010
15997	(S)NWM	0610515	14010	HAN	Support International Support Group Ministry of Agriculture and Rural Development	Ministry of Agriculture and Rural Development Vietnam	127.260	127.260	30-03-2007	31-12-2012
16457	(S)NWM	0611502	14010	SAA	Program Aid Water Sector-National Water Resources Authority (PAWS-NWRA)	National Water Resources Authority	3.002.713	3.002.713	01-07-2007	31-12-2013

Act. no.	Policy theme	SBE*	CRS code	Budget holder	Activity title	MFA relation	Budget (EUR)	Expenditures 2006-2016	Start	End
								(EUR)		
16664	(S)NWM	0611504	14015	PEK	Strengthening Integrated Water Resources Management in Mongolia, Main Phase	Mongolian Ministry of Nature and Environment	5.990.443	5.990.443	16-11-2007	31-12-2013
17395	(S)NWM	0610513	43040	PRM	Contribution to the Dike Project Commewijne and Coronie	Ministerie van Planning en OS	26.000.000	26.000.000	01-02-2008	31-12-2013
18078	(S)NWM	0611502	14010	DHA	Financial Support to the Twinning Arrangement Phase 3 of the IWRM Sector 2008-2009	Ministry of Infrastructure and Environment	450.163	450.162	01-01-2008	31-12-2011
18187	(S)NWM	0610515	14040	JAK	Pilot Dredging in Jakarta	Rijksdienst voor Ondernemend Nederland	2.472.117	2.472.117	01-06-2008	31-12-2013
18226	(S)NWM	0611502	14020	LAP	Manejo Integral del Agua en el Valle Central de Tarija – Planta de Tratamiento de Aguas Residuales	Prefectura de Tarija	1.600.000	1.600.000	01-08-2008	31-12-2013
18452	(S)NWM	0611502	14010	JAK	Technical Assistance six Ci's River Basins – Integrated Citarum Water Resources Management Investment Plan (ICWRMIP)	Asian Development Bank	4.263.520	4.263.520	01-07-2008	31-12-2014

Table II.2	2 Delega	ted activitie	s							
Act. no.	Policy theme	SBE*	CRS code	Budget holder	Activity title	MFA relation	Budget (EUR)	Expenditures 2006-2016 (EUR)	Start	End
20484	(S)NWM	0610515	14015	HAN	Ho Chi Minh City Flood and Inundation Management Project	HCMC People's Committee	1.509.112	1.509.112	01-10-2009	31-12-2015
20854	(S)NWM	0610515	14010	DHA	United Nations Convention on the Law of the Sea Support	Fugro Consultants, INC.	147.705	147.706	15-12-2009	31-12-2012
20988	(S)NWM	0610515	14010	SAA	Water Sector Support Programme (WSSP)	Ministry of Planning and International Cooperation	3.414.125	3.414.125	09-12-2009	31-12-2015
21607	(S)NWM	0611502	41050	DHA	Char Development and Settlement Project Phase IV (CDSP IV)	International Fund for Agricultural Development and Euroconsult Mott MacDonald	15.624.870	11.390.014	19-12-2010	31-12-2019
22099	(S)NWM	0620504	41050	LAP	Vivir con el Agua – Programa de Gestión de Riesgos de inundaciones en el Beni	Viceministerio de Recursos Hídricos y Riego	1.249.553	1.249.553	01-10-2010	31-12-2016
22297	(S)NWM	0611501	41010	BOG	Implementation Pilots in IWRM for the Purpose of Climate Adaptation	ASOCARS	3.806.670	3.806.671	01-12-2010	30-06-2015
22949	(S)NWM	0610518	14015	NAI	One Lake Naivasha for All	World Wildlife Fund Kenya	634.818	634.819	01-07-2011	30-06-2013
23089	(S)NWM	0611502	14010	ISL	Asian Development Bank – Water Sector Task Force	International and National Consultants	83.829	83.830	10-08-2011	10-07-2012

Table II.2	2 Delega	ted activitie	s							
Act. no.	Policy theme	SBE*	CRS code	Budget holder	Activity title	MFA relation	Budget (EUR)	Expenditures 2006-2016 (EUR)	Start	End
23583	(S)NWM	0611502	41050	JAK	Bridging Phase Jakarta Coastal Development Project	Rijksdienst voor Ondernemend Nederland	429.213	429.213	01-12-2011	31-12-2014
23928	(S)NWM	0610515	14020	MAP	Technical Assistance Monitoring Protocol ASAS	Alterra	17.981	17.981	01-01-2012	31-12-2013
24083	(S)NWM	0610515	14010	MAP	Support to EKN for Development of the Water Program	Multiple Parties	129.726	129.725	10-04-2012	31-12-2014
24276	(S)NWM	0611502	14015	СОТ	Programme Pluriannuel d'Appui au Secteur de l'Eau et de l'Assainissement Phase II (PPEA II) – Gestion Intégree des Ressources en Eau	Ministère de l'Economie et des Finance	1.841.683	1.841.683	10-06-2012	31-03-2017
24278	(S)NWM	0611502	14010	СОТ	Programme Pluriannuel d'Appui au Secteur de l'Eau et de l'Assainissement Phase II (PPEA II) – Gestion Intégree des Ressources en Eau – Assistance Technique	COWI A/S	3.896.000	3.828.008	10-06-2012	31-03-2017
24472	(S)NWM	0611502	41050	JAK	Jakarta Coastal Development Program: Master Planning Phase	Rijksdienst voor Ondernemend Nederland	3.500.000	3.500.000	01-11-2012	31-12-2016

Table II.2	2 Delega	ted activitie	25							
Act. no.	Policy theme	SBE*	CRS code	Budget holder	Activity title	MFA relation	Budget (EUR)	Expenditures 2006-2016 (EUR)	Start	End
24499	(S)NWM	0611502	14040	МАР	Cooperation ARA Zambeze	Administracao Regional de Águas do Zambeze (ARA-Zambeze)	5.957.000	4.255.239	01-10-2012	30-06-2019
24600	(S)NWM	0611502	14010	МАР	Sectoral Support to the Water Sector in Mozambique Phase V (ASAS V)	Ministry of Public Works and Housing (MOPH)	18.665.174	6.810.436	01-10-2012	31-12-2017
24620	(S)NWM	0611502	14010	JAK	Banger Polder Project Semarang	Hoogheemraad- schap van Schieland en de Krimpener- waard	165.000	156.750	01-10-2012	30-06-2018
24745	(S)NWM	0611502	14030	JBA	Program for the Water Sector between South Sudan and the Netherlands (ProWaS/ SSN) Water for Eastern Equatoria State (EES)	Niras International Consulting	28.366.450	9.434.220	01-10-2013	30-04-2019
24789	(S)NWM	0611502	14015	DHA	United Nations Development Assistance Framework (UNDAF) – United Nations Development Programme – Integrated Water Management	United Nations Development Programme	5.756.225	5.693.054	01-11-2012	31-12-2018
24879	(S)NWM	0611502	41010	BAM	Outil de Prédiction des Inondations dans la Delta Intérieur du Niger (OPIDIN)	Wetlands International	285.006	285.006	01-12-2012	31-12-2015

Table II.2	2 Delega	ted activitie	s							
Act. no.	Policy theme	SBE*	CRS code	Budget holder	Activity title	MFA relation	Budget (EUR)	Expenditures 2006-2016 (EUR)	Start	End
24981	(S)NWM	0611502	14015	NAI	Integrated Water Resource Action Plan Programme (IWRAP)	World Wildlife Fund Kenya	3.818.365	3.299.173	21-11-2012	31-12-2017
25239	(S)NWM	0611502	14010	KIG	Technical Assistance to the Integrated Water Resources Mangement Sub-Sector of Rwanda	CDP Consultants	337.977	337.977	20-02-2013	31-12-2015
25371	(S)NWM	0611502	14030	JBA	Program for the Water Sector between South Sudan and the Netherlands (ProWaS/ SSN) Water for Lakes State (Lakes)	Euroconsult Mott MacDonald	31.865.600	10.821.192	01-09-2013	31-08-2018
25451	(S)NWM	0611502	14015	NAI	Sustainable Water Management Mara River Basin (SWMM)	IHE Delft Institute for Water Education	8.000.000	6.867.020	02-05-2013	31-12-2018
25545	(S)NWM	0611502	14010	DHA	Formulation of the Bangladesh Delta Plan 2100 (BDP 2100)	Government of Bangladesh Group	8.782.253	7.664.850	01-09-2013	30-06-2018
26083	(S)NWM	0611502	14010	JBA	IWRM for Imatong Mountains	African Wildlife Foundation	921.810	921.810	01-12-2013	31-12-2018
26224	(S)NWM	0611502	16010	DHA	Enhancing Resilience to Natural Disasters and Effects of Climate Change	United Nations World Food Programme	1.265.915	1.265.915	01-01-2014	31-12-2016

Table II.2	2 Delega	ted activitie	s							
Act. no.	Policy theme	SBE*	CRS code	Budget holder	Activity title	MFA relation	Budget (EUR)	Expenditures 2006-2016 (EUR)	Start	End
26408	(S)NWM	0611502	14040	DHA	Flood and Riverbank Erosion Risk Management Investment Program – Tranche 1 (FRERMIP)	Asian Development Bank	12.871.161	7.375.080	01-05-2014	31-12-2019
26619	(S)NWM	0611502	41050	JAK	Rotterdam-DKI Jakarta Training Programme	NESO-Netherlands Education Support Office	324.607	292.146	01-08-2014	30-06-2017
26681	(S)NWM	0611502	14010	МАР	Support to the Cooperation Programme Between ARA-SUL and Wetterskip Fryslan	Wetterskip Fryslan	525.000	498.725	01-09-2014	31-12-2017
26783	(S)NWM	0611502	14010	BAM	Outil de Prédiction des Inondations dans la Delta Intérieur du Niger BIS (OPIDIN-BIS)	Wetlands International	99.880	99.880	01-04-2014	31-12-2016
26816	(S)NWM	0610518	14030	ACC	GNWP-Living Water from the Mountain: Protecting Atewa Water Resources	International Union for the Conservation of Nature – National Committee of the Netherlands	1.448.059	1.194.877	01-09-2014	31-03-2018
26817	(S)NWM	0611502	14010	KIG	Rwanda Integrated Water Management Programme	Euroconsult Mott MacDonald	35.000.000	8.155.085	01-12-2014	31-12-2021

Act. no.	Policy theme	SBE*	CRS code	Budget holder	Activity title	MFA relation	Budget (EUR)	Expenditures 2006-2016 (EUR)	Start	End
28427	(S)NWM	0611502	14020	JAK	National Capital City Integrated Development Program (NCICD) Phase II: General Consultant	Rijksdienst voor Ondernemend Nederland	4.000.000	300.000	01-06-2016	30-06-2020
28449	(S)NWM	0611502	41050	JAK	National Capital City Integrated Development Program (NCICD) Phase II: Knowledge Development Component	Stichting Deltares	1.500.000	150.000	01-06-2016	31-12-2019
28941	(S)NWM	0611502	14010	СОТ	Formulation Programme Eau et Assainissement	Energy Engineering Solutions, Consultants, Gov Institutions and Knowledge Institutions	800.000	391.401	15-04-2016	31-03-2017
29296	(S)NWM	0611502	14040	СОТ	OmiDelta	SNV	21.625.000	2.642.345	28-11-2016	30-06-2022
29379	(S)NWM	0611502	41050	JAK	Dutch Training and Exposure Programme Rotterdam Phase II (DUTEP II)	NESO – Netherlands Education Support Office	330.149	124.745	01-11-2016	30-06-2020
29715	(S)NWM	0611502	14010	МАР	Contribution to the Implementation of the Beira Master Plan	Rijksdienst voor Ondernemend Nederland	1.500.000	492.902	01-08-2016	31-12-2021

Act. no.	Policy theme	SBE*	CRS code	Budget holder	Activity title	MFA relation	Budget (EUR)	Expenditures 2006-2016 (EUR)	Start	End
14544+ 14550	(S)NWM	0611502	41030	ISL	Indus for All Programme	World Wildlife Fund Pakistan	6.471.933	6.471.934	01-07-2006	31-12-2013
25504 (26397)	(S)NWM	0611502 + 0610518	14010	DHA	Pilot Urban Dredging Project Dhaka	Vitens-Evides International (VEI)	5.425.581	5.154.302	23-05-2013	31-12-2017
38 +39	(S)NWM	0610515	14010	DHA	Integrated Planning for Sustainable Water Management (IPSWAM) Technical and Financial Assistance	Bangladesh Water Development Board	9.915.867	6.902.465	01-03-2002	31-12-2013
7213	TWM	0613500	14040	DAK	Programme de Gestion Intégrée des Ressources en Eau et de l'Environment du Fleuve Sénégal	World Bank	6.083.511	3.968.090	01-01-2004	31-12-2013
9743	тwм	0610513	43040	BAM	Programme Gestion Intégrée des Ressources en Eau du Niger Supérieur (GIRENS)	Gestion Intégrée des Ressources en Eau du Niger Supérieur	1.838.774	657.663	01-09-2004	30-11-2008
10279	TWM	0610515	14010	HAN	Mekong River Commission's Flood Management and Mitigation Programme (MRC FMMP)	Mekong River Commission	10.110.909	8.960.889	01-10-2004	31-12-2016
14548	TWM	0611502	14010	МАР	Progressive Realisation of the Incomaputo Agreement (PRIMA)	National Water Directorate (DNA)	7.417.971	7.417.971	01-08-2006	31-12-2013

Act. no.	Policy theme	SBE*	CRS code	Budget holder	Activity title	MFA relation	Budget (EUR)	Expenditures 2006-2016 (EUR)	Start	End
15376	TWM	0611502	14040	BAM	Programme Gestion Intégrée des Ressources en Eau du Niger Supérieur Phase II (GIRENS II)	Ministère des Mines, de l'Energie et de l'Eau	3.338.267	3.338.266	01-10-2006	31-12-2011
16419	TWM	0611502	14010	ADD	Nile Basin Initiative (NBI) – Eastern Nile Technical Regional Office (ENTRO)	Eastern Nile Technical Regional Office	650.763	650.762	01-07-2007	31-12-2014
18810	TWM	0611504	14040	DAK	SN Organisation pour la Mise en Valeur du Fleuve Senegal (OMVS) – Water/Environment	World Bank	5.874.041	5.874.041	01-10-2008	31-12-2013
19965	TWM	0611504	14040	DAK	Organisation pour la Mise en Valeur du Fleuve Sénégal (OMVS) – Trustfund II	World Bank	9.500.000	9.500.000	01-06-2009	31-12-2014
20248	TWM	0611502	14040	MAP	Inception Phase Ecological Flows in the Zambezi River Basin (ZRB)	World Wildlife Fund Southern Africa	515.000	515.000	26-07-2010	31-12-2014
20387	TWM	0611502	14040	DHA	Dialogue for Sustainable Management of Trans-Boundary Water Regimes in South Asia: A Bangladesh-India Initiative	International Union for the Conservation of Nature – Asia Regional Office	5.060.017	5.060.017	01-02-2010	31-12-2016

Table II.2	Table II.2 Delegated activities									
Act. no.	Policy theme	SBE*	CRS code	Budget holder	Activity title	MFA relation	Budget (EUR)	Expenditures 2006-2016 (EUR)	Start	End
24938	TWM	0611502	14010	KIG	Transboundary Ecosystem Based Management of Fishery Resources and oil Governance in the Great Lakes of Africa	International Union for the Conservation of Nature – The Netherlands	3.233.361	3.233.361	01-12-2012	28-02-2017
25593	тwм	0611502	14010	KIG	Lake Kivu Monitoring Program- Environmental Monitoring and Organisational Development Project (LK-EMOD Project)	Energy, Water and Sanitation Authority (EWSA)/MININFRA	350.070	350.070	01-08-2013	31-07-2017
25858	TWM	0610518	14022	RAM	Management of Trans-Boundary Wastewater Pollution in Baqa Al-Sharqia and Nazlat	United Nations Development Programme	316.173	316.173	01-11-2013	31-12-2017
26989	TWM	0611502	14015	BAM	Programme Conjoint d'Appio à la Gestion Intégrée des Ressources en Eau (PCA-GIRE) 2015-2019	Ministère de l'Environment, de l'Eau, et de l'Assainissement and Wetlands International Mali	17.298.321	5.677.720	01-12-2014	31-12-2020

Act. no.	Policy theme	SBE*	CRS code	Budget holder	Activity title	MFA relation	Budget (EUR)	Expenditures 2006-2016 (EUR)	Start	End
27413	тwм	0611502	14010	KIG	Lake Kivu Monitoring Program- Environmental Monitoring and Organisational Development Project (LK-EMOD Project)	Energy, Water and Sanitation Authority (EWSA)/MININFRA	9.203.547	4.673.688	01-01-2014	31-07-2020
29453	TWM	0611502	14031	KIG	Water 4 Virungas	MDF Global	14.155.000	1.300.000	01-11-2016	31-12-2021
10379	ССРТ	0611502	41030	ISL	United Nations Development Programme Wetlands Project	United Nations Development Programme	3.934.959	3.147.410	01-12-2004	31-12-2014
12181	ССРТ	0611502	14010	ISL	Bank Netherlands Water Support Program for Pakistan	World Bank – SASAR Unit	1.201.477	786.477	01-07-2005	31-12-2012
14229	ССРТ	0611502	41010	ADD	Horn of Africa Regional Environment Programme Support Fund	Horn of Africa Regional Environment Programme Support Fund	363.107	363.107	01-04-2006	01-02-2010
15412	ССРТ	0611502	41010	ADD	Support to Addis Ababa University (AAU)	Addis Ababa University (AAU)	9.000.000	9.000.000	01-11-2006	31-12-2015
17042	ССРТ	0611502	41081	ADD	Contribution RNE – Horn of Africa Regional Environment Programme to Forum for Environment	Forum for Environment	982.511	982.511	01-11-2007	31-12-2013

Table II.2	2 Delega	ted activitie	s							
Act. no.	Policy theme	SBE*	CRS code	Budget holder	Activity title	MFA relation	Budget (EUR)	Expenditures 2006-2016 (EUR)	Start	End
17621	ССРТ	0611502	31210	ADD	Support to Ethiopia Wetlands and Natural Resources Association	Ethiopia Wetlands and Natural Resources Association	730.802	730.802	01-04-2008	30-04-2012
21916	ССРТ	0611502	14010	ISL	Joint ONE United Nations Programme on Environment Joint Programme Components Phase III	United Nations Development Programme	2.441.877	2.563.125	01-09-2010	31-12-2014
23716	ССРТ	0610510	41030	NAI	Sustainable Landscapes and Livelihoods	African Conservation Centre	3.316.054	3.071.283	01-03-2012	30-04-2017
23856	ССРТ	0610510	41030	NAI	Sustainable Water, Land and Natural Resource Management for Human and Economic Benefit in Kenya	African Wildlife Foundation	9.381.358	8.919.609	01-07-2012	30-06-2017
9525	AWM	0610515	14010	DHA	IWRM Program Support Fund	Consultant Group	396.292	352.878	01-04-2004	31-12-2009
10982	AWM	0611502	14010	ISL	Balochistan Resource Management Program – Technical Assistance Water Component	Asian Development Bank	1.325.543	993.543	01-01-2005	31-12-2009
11155	AWM	0610515	14010	KAI	Egyptian-Dutch Advisory Panel on Water Management Project Phase IV	Ministry of Water Resources and Irrigation	4.174.204	3.551.360	15-11-2004	30-06-2014

Act. no.	Policy theme	SBE*	CRS code	Budget holder	Activity title	MFA relation	Budget (EUR)	Expenditures 2006-2016 (EUR)	Start	End
12338	AWM	0610515	14010	KAI	Public Private Partnership: West Delta Water Conservation and Irrigation Rehabilitation Project	Ministry of Water Resources and Irrigation	469.450	243.690	01-07-2005	31-12-2013
12688	AWM	0610515	14015	HAN	Upgrading Training Capacity in Coastal Engineering Hanoi Water Resources University Phase II	Ministry of Agriculture and Rural Development Vietnam	2.324.924	1.674.924	01-10-2005	31-12-2010
15994	AWM	0610515	14015	HAN	Water Sector Review	Asian Development Bank	448.800	448.800	01-04-2007	31-12-2010
16526	AWM	0611502	14010	СОТ	l'Appui par le Partenariat National de l'Eau au Programme Pluriannuel d'Appui au Secteur de l'Eau et de l'Assainissement (PPEA PNE) 2007-2011	Partenariat National de l'Eau du Bénin	1.522.330	1.522.329	03-07-2007	31-12-2016
16706	AWM	0611502	14010	МАР	WaterNet Phase IIB – Human Capacity Building in Integral Water Resources Management	WaterNet	3.105.000	3.105.000	01-01-2008	30-06-2013
17007	AWM	0610515	14015	HAN	Technical Assistance for Sea Dike Research	Ministry of Agriculture and Rural Development Vietnam	971.835	971.835	01-11-2007	31-12-2012

Act. no.	Policy theme	SBE*	CRS code	Budget holder	Activity title	MFA relation	Budget (EUR)	Expenditures 2006-2016 (EUR)	Start	End
18736	AWM	0610515	14010	DHA	Water Sector Support Fund	Bangladesh University of Engineering and Technology	284.039	284.038	01-12-2008	31-12-2012
19909	AWM	0610515	14010	MAP	Instituto de Promocao de Investigacao em Águas	Ministério de Negócios Estrangeiros e Cooperacao	337.740	337.740	01-04-2009	31-12-2014
22137	AWM	0611502	14010	ISL	Bank Netherlands Water Support Program for Pakistan Phase II	World Bank	1.145.500	1.145.500	01-12-2010	31-12-2015
23732	AWM	0611502	14010	DHA	Water Support Fund 2012-2015	multiple parties	671.588	671.587	01-02-2012	31-12-2016
23841	AWM	0611502	14010	BAM	POF 2012 IWRM	multiple parties	88.721	88.721	15-02-2012	31-12-2015
24100	AWM	0610515	14010	MAP	External Support in Pre-Award Organisational Assessments	multiple parties	26.798	26.798	01-04-2012	31-12-2013
25152	AWM	0611502	14010	MAP	WaterNet Phase III	WaterNet Trust	5.790.563	5.403.964	01-01-2012	31-12-2017
25190	AWM	0611502	14010	BAM	POF 2013 IWRM	multiple parties	41.794	41.794	23-01-2013	31-12-2016
25495	AWM	0611502	14010	SAA	Assessment of Water Conflict Prevention and Resolution Frameworks in Yemen	The Hague Institute for Global Justice	123.987	123.987	20-07-2013	31-12-2015

Table II.2	0	ated activitie								
Act. no.	Policy theme	SBE*	CRS code	Budget holder	Activity title	MFA relation	Budget (EUR)	Expenditures 2006-2016 (EUR)	Start	End
25933	AWM	0610518	14015	RAM	Academic Water Cooperation	Maastricht School of Management	1.331.606	1.265.025	01-11-2013	31-12-2017
26260	AWM	0611502	14010	SAA	Support Fund Water Policy Implementation (SFWPI)	Developing Country Based NGO Group	28.121	28.121	01-02-2014	31-12-2015
26318	AWM	0611502	14010	BAM	POF 2014 IWRM	Multiple Parties	73.242	73.242	17-02-2014	31-12-2016
26533	AWM	0610518	14081	RAM	Water Forum 2014	Birzeit University	15.890	15.890	01-05-2014	30-04-2015
26579	AWM	0610518	14010	NAI	Kenya Innovative Financing Facility for Water (KIFFWA)	WASTE B.V.	10.142.350	2.491.150	01-05-2014	31-12-2021
26584	AWM	0611502	14010	BAM	Gao Plus	Enda Mali	900.000	900.000	01-07-2014	31-12-2016
26606	AWM	0611502	41050	JAK	Joint Cooperation Programme Phase II	Stichting Deltares	1.525.000	1.448.750	01-07-2014	31-12-2017
26782	AWM	0611502	14010	MAP	(Water) Spearhead and Crosscutting BOF	Consultant Group	1.257.809	602.277	01-07-2014	31-07-2018
27219	AWM	0611502	14010	СОТ	Programme Pluriannuel d'Appui au Secteur de l'Eau et de l'Assainissement Phase II (PPEA II) – Missions	Consultant Group	1.110.710	1.110.709	01-07-2014	31-MRT- 2018
27230	AWM	0611502	14010	JAK	Delegated Representative for the Bilateral Cooperation Water	Rijksdienst voor Ondernemend Nederland	1.800.000	1.052.146	01-01-2014	01-11-2017

Table II.2	Table II.2 Delegated activities									
Act. no.	Policy theme	SBE*	CRS code	Budget holder	Activity title	MFA relation	Budget (EUR)	Expenditures 2006-2016 (EUR)	Start	End
27307	AWM	0611502	14010	BAM	POF 2015 IWRM	Multiple Parties	121.486	121.486	01-01-2015	30-06-2016
28426	AWM	0611502	41050	JAK	Water Management Support Facility by Dutch Water Authorities (DWA)	Hoogheemraad- schap van Schieland en de Krimpener- waard	200.000	47.500	01-07-2016	31-07-2020
28817	AWM	0611502	14010	BAM	POF 2016 IWRM	Multiple Parties	396.730	85.432	01-01-2016	30-06-2017
29729	AWM	0611502	14081	МАР	WaterNet Phase IV – Strengthening Capacity for Regional Water Solutions	WaterNet	2.700.000	900.000	01-12-2016	31-12-2022

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Table II.3	* SBE numbers and corresponding names	
SBE nr.	SBE Name	Number of activities
0610510	Milieu decentraal: Algemeen	3
0610513	Voedselzekerheid (decentraal)	4
0610515	Water	42
0610518	Water decentraal: Drinkwater en sanitatie	6
0611501	Milieu decentraal: biodiversiteit en bossen	2
0611502	Milieu decentraal: integraal waterbeheer	100
0611504	Milieu decentraal: themadoorsnijdende programma's in milieu-landen	3
0613500	Exit programma's	1
0620504	Water centraal: Integraal waterbeheer	45
0620510	Klimaat centraal: Algemeen	1
0620511	Milieu centraal: klimaat, energie en milieutechnologie	2
0620512	Milieu centraal: internationaal milieubeleid en instrumenten	3
1040504	Water centraal: Drinkwater en sanitatie	2
1040508	Wet- en regelgeving	1
1040512	Spec. act.: Internationaal milieubeleid en instrumenten	1
1070500	Onderzoeksprogramma	2
1911500	MFS/TMF: milieu	3
1917500	WB-partnership programma	2
1987500	Realiseren ecologisch houdbare voedselsystemen	1
7015500	Noodhulpfonds	1

Annex 3 Definition of terms

Table III.1 Definition of terms

As key terms in the water resource management sector were not clearly defined by MFA, the websites of international organisations active in the sector were explored for definitions that could be used in this report. Where those websites did not offer useable definitions, further exploration of the internet was undertaken. The definitions shown below are IOB's aggregated interpretation of what could be derived from these sources.

Catchment	A catchment is an area where water is collected by the natural landscape. In a catchment, all rain and run-off water eventually flows to a creek, river, dam, lake, ocean, or into a groundwater system.
Climate change adaptation	Climate change adaptation means anticipating the adverse effects of climate change and taking appropriate action to prevent or minimise the damage they can cause, or taking advantage of opportunities that may arise. (Source: EU.) Mitigation means dealing with the causes of climate change by reducing green gas emissions.
Delta	A landform shaped by the influence of rivers and other water bodies (ocean, sea, estuary, lake, or reservoir).
Inclusive growth	Inclusive growth is economic growth that creates opportunities for all segments of the population and distributes the dividends of increased prosperity, both in monetary and non-monetary terms, fairly across society. (Source: OECD DAC.)
Integrated water resource management	A process that promotes the coordinated development and management of water, land and related resources in order to maximise economic and social welfare in an equitable manner without compromising the sustainability of vital ecosystems. (Source: Global Water Partnership.)
Intervention logic	The intervention logic documents the conceptual link between an intervention's input to its output and subsequently, to its immediate, intermediate and final outcomes. Thus, an intervention logic allows an assessment of an intervention's contribution to achieving its intended outcomes.
Public-private partnership	A public-private partnership is a long-term contract between a private party and government entity, for providing a public asset or service, in which the private party bears significant risk and management responsibility, and remuneration is linked to performance. (Source: World Bank.)
River basin	A river basin is the land that water flows across or under on its way to a river. Just as a bathtub catches all of the water that falls within its sides, a river basin sends all of the water falling within it to a central river and out to an estuary or to the ocean. Approximately 40 per cent of the world's population lives in river and lake basins that comprise two or more countries, and over 90 per cent lives in countries that share basins.
Table III.1 Definition of term	IS
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Theory of change	A theory of change documents the causal links between inputs, activities, outputs and intermediate and final outcomes, and identifies the underlying assumptions. (Source: international initiative for impact evaluation (3ie).)
Water management	Water management is the activity of planning, developing, distributing and managing the optimum use of water resources.
Water productivity	Water productivity or 'crop per drop' is defined as crop yield per cubic meter of water consumption, including green water (effective rainfall) for rain-fed areas and both 'green' water and 'blue' water (diverted water from water systems) for irrigated areas.
Water security	The capacity of a population to safeguard sustainable access to adequate quantities of acceptable quality water for sustaining livelihoods, human wellbeing and socio-economic development, for ensuring protection against waterborne pollution and water-related disasters, and for preserving ecosystems in a climate of peace and political stability. (Source: UN Water.)
Watershed	A watershed is the area of land where all of the water that falls in it and drains off of it goes to a common outlet. Watersheds can be as small as a footprint or large enough to encompass all the land that drains water into rivers that drain into the sea.

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Annex 4 Global, regional and multi-country activities across themes

This annex presents a short write-up of findings on the effectiveness and efficiency of Dutch (co-)funded global, regional and multi-country activities that this review categorises as 'Across Water Management'. The findings are derived from external mid-term and final or ex post evaluation reports. For descriptive information on these (partly) Dutch-funded activities, for example on the MFA budget for the activities and expenditures over the review period, see Annex 2. Not all the evaluations addressed both the effectiveness and efficiency criteria, and the way in which these were addressed varied. The notes in this annex are not summaries of the evaluation reports in question, and as such do not do full justice to the richness of these reports. Observations made during the country case studies pertaining to particular activities have been added.

Global Water Partnership

Title: Global Water Partnership core contribution

Evaluation reports: Global Water Partnership Joint Donor External Evaluation (Gayfer et al., 2008); Global Water Partnership Strategy 2009 to 2013; Global Program Evaluation GWP (IEG, 2010); Mid-Term Review (Nilsson et al., 2011).

The Swedish International Development Cooperation Agency (Sida), the United Nations Development Programme (UNDP) and the World Bank established the Global Water Partnership (GWP) in 1996 in response to international concern about deteriorating freshwater resources. In 2002, the Global Water Partnership Organisation (GWPO) was registered as independent intergovernmental organisation. The Netherlands was one of the co-founders of the GWPO. It co-funded the GWP and participated in meetings and technical committees from the early stages.

The initial mission of the GWP was to 'support countries in the sustainable management of their water resources' by means of an advocacy network based on the principles of integrated water resources management. Its objectives were: (a) to clearly establish the principles of sustainable water resource management; (b) to identify gaps and stimulate partners to meet critical needs within their available human and financial resources; (c) to support action at the local, national, regional, or river basin level that follows the principles of sustainable water resources management; and (d) to help match needs to available resources. For the period 2009-2013, the goals became to: (1) promote water as a key part of sustainable development; (2) address various critical development challenges; (3) reinforce knowledge sharing and communications; and (4) build a more effective network. For each goal, a list of result areas was specified (Nilsson, 2011, p. 1).

Effectiveness

The joint donor external evaluation in 2008 reported various key achievements. One such achievement was that the network had expanded from 28 Country Water Partnerships to 71 and from nine Regional Technical Advisory Committees to 12 Regional Water Partnerships (PARC 2008, p. 5). The number of members tripled from 600 to over 1,800. Building on its work over the last ten years, greater awareness of IWRM was found across the network. There was also evidence that a number of countries moved from awareness raising to facilitating tangible shifts in policy and legislation in support of IWRM principles. The report of a mid-term review for the period 2009-2013 stated that the GWP strategy was too complex, the set of result areas was too ambitious and all-encompassing, and a future strategy could be more focused on priority issues (Nilsson et al., 2013, p. 5). An important area where planned results lagged behind was the engagement with the relevant regional and country levels. Many respondents representing lower networking levels stated that more funding support would be needed, and that GWP outputs should be more oriented towards providing more applied guidance for IWRM implementation (Nilsson et al., p. iii). The country case studies found that the GWP country chapters were active in information gathering, IWRM awareness raising and dialogue, but were minor players in supporting improvement of water management.

Efficiency

The mid-term review raised funding issues, stating that funding of the strategy was considered to be at the lower limit and overhead costs to be high compared to available budgets. The budgeted costs of governance and the global secretariat, at 32% of the total budget, were stated to be high but understandable, considering the nature of how the GWPO operated. The financial situation within the existing organisational arrangement implied that the contribution from the GWP to the regions was not large enough, leaving only small budgets for implementation, to achieve a reasonable level of cost efficiency (Nilsson, 2011, p. iv).

Knowledge organisations

As mentioned above, the knowledge organisation through which most support was provided was UNESCO-IHE, based in Delft. Other contributions reported on below, based on available evaluation reports, are UNDP CAP-NET, WaterNet for the SADC region, and the MFA funded research subsidy facility of NWO/WOTRO, 'Urbanising Deltas of the World'.

Title: Programme support UNESCO-IHE³⁸

Evaluation report: External Evaluation DGIS/UNESCO-IHE Programmatic Cooperation (DUPC) (Krijnen et al., 2013).

A major activity over the review period, for which an external mid-term evaluation report is available, was the DGIS UNESCO-IHE Programmatic Cooperation (DUPC), 2008-2014. The

objectives were: (1) partnership building, (2) education and institutional capacity development, (3) knowledge generation and research, (4) policy forum, and (5) advisory services. The financial envelope was initially EUR 26 million. The DUPC was preceded by earlier programmatic cooperation: Partnership for Water Education, 2006-2010 (EUR 10 million); and sector support capacity building in support of MDGs, 2004-2008 (EUR 10 million). A further MFA contribution to DUPC, Phase II, 2016-2021, was approved with a budget allocation of EUR 24.1 million.

Effectiveness

The external mid-term evaluation report (Krijnen et al., 2013) on the MFA UNESCO-IHE Programmatic Cooperation, 2008-2014, concluded that the DUPC was relevant and that, generally speaking, activities and project results had achieved the objectives. The programme addressed important problems in the water sector in developing countries, with an emphasis on promoting good quality education and research of partner organisations (Krijnen et al., 2013, p. 7). DUPC was able to adjust to new challenges and policy priorities, with an increasing focus on climate change research, transboundary management of river basins, collaborative management of wetland and river basin resources, and livelihoods of adjacent/ riparian populations. DUPC was also stated to provide good opportunities in partnership development, education and research, together with multi-stakeholder involvement in pro-poor approaches to societal problems. UNESCO-IHE was stated to be in a unique position, in that it has alumni from some 160 countries and covers a large spectrum of policy and development inspired themes, providing an added value as knowledge broker. Partnerships had greatly progressed, but a lot was still needed to level the playing field for partners. The report states that one has to seriously wonder if partnership development is an aim in itself or is mainly meant to serve considerations of efficiency (Krijnen et al., 2013, p. 58). A majority of the 144 small projects that were funded were linked to collaborative forms of policy and development research. However, internal cohesion between projects was not sufficiently demonstrated, negatively affecting transparency and accountability at the level of outcomes and impacts (Krijnen et al., 2013, p. 8). The programme was found to be not in a position to sustain itself and continued to mostly depend on MFA funding (Krijnen et al., 2013, p. 10).

Efficiency

Overall, management was found to be very efficient. But the report said that staff costs absorbed a significant share of the budget (35%). It raised the possibility of actively monitoring reduction of staff costs for collaborative research. It further pointed to the international 'workshop culture' that can become more efficient by increasingly promoting ownership by regional and national partners (Krijnen et al., 2013, p. 59).

Title: Network for capacity building IWM (CAP-NET)

Evaluation report: Joint donor Review Cap-Net Phase III (PEMconsult, 2014)

CAP-NET – capacity building in sustainable water management – was launched in 2002 by UNDP and UNESCO-IHE as and international network for capacity building in sustainable water management. CAP-NET's network comprises a wide range of knowledge

organisations, including many with Dutch connections, aiming at capacity building and strengthening of partnerships and knowledge management with a focus on implementation of IWRM in practice. High-level goals were sustainable management of water resources and improved access to basic water supply and sanitation services, benefiting the poor and contributing to improved livelihoods.

Effectiveness

An external joint donor review report for CAP-NET phase III, 2011-2017, (Prasada Rao et al., 2014), concluded that CAP-NET is effective, but with the potential to be further enhanced with more emphasis on institutional and long-term capacity development, and on reaching policy-makers, local stakeholders and other sectors (Prasada Rao et al., 2014, p. 9). The training provided was reported to be of high quality. Targets for improving management practices had been exceeded (3,427 people trained plus 47 basin organisations), but the approach was short term. Strengthening of partnerships through development of skills, assisting networks and partnership building with key agencies, had largely exceeded targets. Development of training material was largely achieved, and monitoring targets were partly reached. Improving capacity of WRM sustainably, adapting to climate change and the targeted coverage of countries were unlikely to be reached, however, with local stakeholders often not being reached. The review team found that CAP-NET (and its partner networks) were generally not institutionally and financially sustainable. CAP-NET relied entirely on SIDA and DGIS funding. The extent to which the capacities and approaches that were developed were sustainable appeared to vary. The skills provided to training participants were likely to remain if the skills were applied. The further transfer of skills through short-term training courses appeared more mixed. It was not always likely that replicate training would continue without a structure backing them (Prasada Rao et al., 2014, p. 10).

Efficiency

The review team found CAP-NET to be cost-effective as a result of: (1) the high ability to mobilise international partners to leverage the expertise or outreach; (2) the voluntary inputs by the members of partner networks; and (3) the significant mobilisation of co-funding. But there was some scope for further improvements, e.g. by promoting network-to-network support more systematically and by better use of the monitoring system to capture results and provide strategic guidance to implementation (Prasada Rao et al., 2014, p. 8).

Title: WaterNet

Evaluation report: Internally commissioned external review of WaterNET (Pegasys, 2011); mid-term review of WaterNet Phase III (Enviroplan, 2015).

Initiated by UNESCO-IHE and partner organisations in Zimbabwe, and later based as an independent legal entity in Botswana, WaterNet provided for university graduate studies up to MSc level in IWM in southern Africa, while widening its focus towards capacity building, strengthening of its network and sustainability. The Dutch central funding to WaterNet for the period amounted to EUR 1.5 million. In addition, WaterNet received substantial funding

through the delegated budget of the embassy in Mozambique: EUR 3.1 million for 2008-2013, EUR 5.8 million for 2012-2017 and EUR 2,7 million for 2016-2022. This was not specifically for Mozambique; it was for all of WaterNet's work in southern Africa. In addition, WaterNet received funding through the UNESCO-IHE DUPC programme.

Effectiveness

The external review in of WaterNet in 2011 concluded that the organisation was doing extremely well overall and was playing an important role in southern Africa. Its Master's programme was found to be running well, but the quality of research needed attention, as well as testing demand with key regional institutions and employers, and engagement with relevant government departments. An additional issue reported was financial sustainability, in view of continued substantial dependency on donor funding. A mid-term evaluation of WaterNet Phase III in 2015 reaffirmed these generally positive findings, and noted the programme's strong links with SADC and the growing emphasis on short courses as well as graduate studies. It also noted that WaterNet's strategy lacked specific targets against which progress could be objectively measured (Enviroplan, 2015, p. iii).

Efficiency

The review identified the extent to which the network is member owned and implemented as an issue affecting performance, requiring the secretariat to continue playing a strong coordination role (Pegasys 2011, p. 17).

Title: NWO/WOTRO Urbanising deltas of the world

Evaluation report: Mid-Term Review of the NWO-WOTRO Research Programme on Urbanising Deltas of the World (COWATER, 2016).

The aim of the MFA-funded facility Urbanising Deltas of the World (UDW) of the Dutch Scientific Research Organisation (NWO), subsidising research projects based on calls for proposals, was to contribute to global water safety, water and food security and sustainable economic development in deltas by providing more effective responses to increasing pressure and rapid changes in these areas. The programme aimed to have a positive impact by providing resources to conduct research on effective and efficient responses to changes such as climate change, population growth and increasing economic activities in the deltas where the program is investing its support (COWATER 2016, p. 2). The review came at a time when the first batch of projects had operated for only one year out of 4-5 years duration and the second batch were still in the preparation and mobilisation phase.

Effectiveness

The mid-term review of the NWO/WOTRO Urbanising Deltas of the World programme in 2016 concluded that the program had much strength: a commitment to trans-disciplinary approaches; direct support for research uptake; North-South partnerships; an emphasis on peer learning; and a talented resource pool reflected both by the research leaders as well as PhD students. From a technical standpoint, the integration of biophysical and social research had placed the UDW programme in a good position to show how modest investments in social learning, networking and planning (compared to say, infrastructure

spending) can have a long term and profound impact in the deltas where they are operating (COWATER 2016, p. 2). Notwithstanding such positive elements in the programme, opportunities that could be better tapped were identified. The programme should aim to consolidate its work in ways that not only increased the profile of the researchers involved, but also strengthened the programme's visibility, and to state with clarity what contribution UDW is making for positive change in the deltas where it operated. Another challenge was that there might be a misalignment between the programme's ambitions and the heavy reliance on PhD students, who might not have the gravitas to effect large-scale change. As of yet, few projects were deeply engaged in the local networks that were championing change in different deltas across the world (COWATER 2016, p. 2).

Efficiency

The UDW programme required flexibility in management give the rapidly evolving environment. In this regard, the programme was found to have done very well. However, the report noted that it would be important to revisit how much funding is available to the local partners. Overreliance on PhDs for the programme's lofty aims was a key weakness, as was the fact that local partners had very few discretionary resources for communications and policy advocacy. In sum, they were willing and keen partners, but not resourced well enough to dedicate the time required to help convert the PhD research into long term change (COWATER 2016, p. 3).

Trust Funds for partnership programmes of Multilateral Development Banks

Titles: World Bank Water Partnership Programme; Asian Development Bank Water Financing Partnership; Inter-American Development Bank Water Partnership fund

Evaluation reports: External Review of the WB WPP (Universalia, 2017); external evaluation of the ADB Water Financing Partnership Facility (Everitt and Patron, 2015); external evaluation of the IDB Water Partnership Fund (Van Maanen, 2007).

The MFA co-funded Trust Funds for the World Bank Water Partnership Programme (WPP, 2008-2017), Asian Development Bank (ADB) Water Financing Partnership Facility (WFPF, 2007-2018 funded from three trust funds including a Dutch Trust Fund) and the Inter-American Development Bank (IDB) Water Partnership Fund (WPF, 2004-2014). Most funding was for the ADB WFPF, followed by the WB WPP. The programmes provided support to the quality of Bank investments, such as for analytical studies; technical assistance for institutional reform and capacity building; policy, investment and sub sector dialogues; knowledge sharing and knowledge products; initiating partnerships; and advancing knowledge-based experience-sharing processes, as well as in part (ADB) providing financial resources for implementation.

The funds supported a large and increasing number of small activities. Up to the external evaluation in 2015, the ADB WFPF had funded 240 projects and activities to provide support to the ADB Water Financing Programme (Everitt et al., 2015, p. v). The WB WPP reported 225 supported activities in 64 countries across six regions in Phase I, with a disbursement of

USD 23.8 million. With Phase II, the WPP supported 462 activities in 81 countries across the Bank's six regions. In doing so it approved grants totalling USD 71.3 million (Universalia, 2017, p. ii).

Effectiveness

Across the evaluation reports the conclusion was that the partnership programmes were relevant and that they were effective (WB, ADB, IDB) at immediate outcome level. The programs were relevant in providing useful platforms for strategic, long-term and multi-party cooperation (ADB, WB); in advancing knowledge within the MDB given its focus on (I) WRM and innovation (IDB, WB); and in allowing an improved quality of projects through expertise and innovation (WB, ADB).

'The majority of Task Team Leaders rank generation of new knowledge among top 5 results... WPP activities moderately contribute to improving capacities of national stakeholders for WRM... through creation of plans and studies that built upon local knowledge and systems, and through training and study tours' (Universalia, 2017, p. iv).

The programmes were effective in influencing the development of (I)WRM strategies and policies in countries (IDB); increasing the volume of technical assistance for promoting reform and capacity building; influencing major amounts of new investments (WB, ADB); and knowledge sharing and building of knowledge partnerships and expertise (WB, ADB). In the case of the WB, at least 133 projects were reported to have been influenced, worth USD 15 billion (Universalia, 2017, p. iv). Since the advent of the ADB WFPF, the Water Financing Programme had averaged USD 2.5 billion per year in investments, with a total of USD 20.6 billion between 2006 and 2014. Of this, approximately 28% was enabled through the WFPF support to project preparation and implementation (Everitt et al., 2015, p. v).

The external review of the WB WPP noted that the result chains for the partnership programmes went too far in attributing impacts on WB project beneficiaries and poverty reduction. The report further noted that a clear definition of terms such as 'pro-poor' and 'gender sensitive' was lacking and that few results had been observed in mainstreaming gender in operations (Universalia, 2017, p. v).

Efficiency

Efficiency was positively assessed (WB, IDB), being flexible and easy to apply (WB, IDB) and among the leanest operational Trust Funds (WB). Activity cycles and delivery were reported as efficient (WB). The ADB WFPF was assessed as efficient at facility level, but at project level as less efficient due to chronic and lengthy delays and slow disbursement (Everitt et al., 2015, p. 42). Added value to Bank clients was assessed as substantial as countries received technical assistance for which no other financial constructions were available (IDB), or because activities positively affected quality and knowledge for projects for relatively modest amounts (WB).

Information gathered from interviews with MDB task managers as part of the country case studies is consistent with the WB evaluation report, stressing the availability of small to

medium funding available at short notice and at times for crucial strategic inputs, which, the task managers said, improved performance.

RVO-administered activities engaging the Dutch water sector

Title: Intensification Water OS

Evaluation: external evaluation of Water OS programme (Van de Putte and Sijssens, 2017).

The Water OS programme was started in 2011. Its objectives were to support multi-annual water programming (MASPs) in partner countries with involvement of expertise from the Dutch water sector, and to support strengthening of inter-departmental cooperation and involvement of the Dutch water sector, linked to the Dutch interdepartmental programme *Water Mondiaal* (Van de Putte and Sijssens, 2017, p. 9). The programme completed its third phase in 2017, with total expenditures of EUR 6.7 million.

Effectiveness

The 2017 external evaluation of the Water OS programme rated the relevance of the programme as highly satisfactory, and effectiveness for most result areas as good and for two as unsatisfactory (Van de Putte and Sijssens, 2017, p. 28). The main results of Phase I were: improved MASPs; a data base of 200 experts; water scans in focus countries executed; country platforms established; and five aid and trade (part time) special advisers appointed for five embassies. For Phase II, the following results were added: the digital TraidWheel knowledge platform; market positioning studies; Dutch parties included in several tenders; increasing number of projects/ programmes in Water OS countries; water advisers supported embassies in monitoring; some structures linking Dutch and local water sectors; relevant policy themes integrated in the water programme. The contribution of advisers to MASPs was valued more in the case of embassy specialists with less background in the water sector (Van de Putte and Sijssens, 2017, p. 24). In most MASPs, climate change was reasonably mainstreamed. The evaluation rated effectiveness with respect to gap filling and establishment of local structures, and to diverse achievements of limited scope, as good. But it considered its effectiveness in terms of mainstreaming of climate and gender and linking to other policy instruments as unsatisfactory. Little practical contribution to mainstreaming climate and gender was found. There was some progress in linking to other policy instruments, but still with limited results. With respect to positioning of the Dutch water sector, results were found to be diverse and country-specific. In three target countries, local structures (platforms in Mozambique and Kenya and a PPP structure in Ghana) were created. In other countries, progress in this area was slower, or was considered not (yet) relevant (Van de Putte and Sijssens, 2017, pp. 24-25). In several countries, the programme contributed to the award of contracts to Dutch parties.

Efficiency

On various dimensions, efficiency was rated between highly satisfactory and satisfactory. An issue identified was the complexity of RVO and NWP subcontracting procedures and the lack of clarity in communication on performance (Van de Putte and Sijssens, 2017, p. 28).

The evaluation found that the programme had evolved into a support facility for embassies that implemented water programmes. For Phase III, the budget was reduced, and thematic experts for climate and gender were discontinued. Over time the budget allocation per country declined sharply from around EUR 21,000 under Water OS 1 to approximately EUR 7,000 under Water OS 3. A reported issue was lack of clarity about balance between policy priorities. The main recommendations were to continue the programme, but also to freshly formulate the follow up as a support facility for embassies, to provide expertise and to facilitate contacts and the use of other policy instruments in support of the bilateral programmes.

Title: Sustainable Water Fund

Evaluation report: mid-term review Sustainable Water Fund (Van Woersem et al., 2016).

An important policy instrument expected to contribute to engagement of the Dutch water sector and private sector in shaping and implementing policy was the Sustainable Water Fund (SWF). The Fund was established in 2012 with a budget of EUR 75 million. The SWF aimed to contribute to sustainable inclusive economic growth by improving water security and water safety in developing countries through providing subsidy to PPP projects (with at least one public, one private and one civil society partner). The SWF intended to encourage innovation and allow for flexibility, but positioned itself where proven pilot projects required support before being able to reach a more sustainable, market-based delivery of services and products. Up to the end of 2015, 23 projects had been approved with a total of 134 partners, of which 45 were Dutch. Seven projects concerned water management (Van Woersem et al., 2016, p. 16).

A mid-term review of the SWF in 2016 concluded:

'The SWF provides new opportunities for the water sector, leads to often interesting partnerships, and produced a number of valid PPP projects. However involving the private sector and related revenue based models proved challenging. The current role of the private sector is overestimated... Also SWF strict subsidy regulations do not always stimulate more risk taking PPPs. The fact that the SWF is above all a fund operating in the realm of development cooperation could not always easily be traced back in the reality of project objectives and results' (Van Woersem et al., 2016, p. v).

As part of the MTR, five out of the seven approved SWF water management projects were visited. Appendix 1 to the report provided detailed information on the activities that were visited and the field visit findings. These were concerned with: (1) moving to improved WRM and commercially organised higher level farming in Ghana; (2) reduction of water footprint of sugar cane production in South Africa; (3) Building with Nature project concerned with improved coastal protection through construction of permeable dams made of poles and brushwood that dampen the waves and capture sediment, linked to community-based improvement of aquaculture practices along the coast of central Java, Indonesia; (4) support to Irrigation Farmers Organisations in Sri Lanka; and (5) wastewater reuse in Jenin, Palestinian Authority. The latter two projects were clearly underperforming. One project had stopped and one had not yet started; and two were considered likely but not sure to

achieve sustainable results. Two projects (Ghana, South Africa) showed clear business cases and mostly valid partnerships, linking irrigation and marketing services to agricultural production, assessed as influential in changing water sector approaches. However, the added value of Dutch expertise in these agricultural production projects was found to be interchangeable with local expertise. The Building with Nature project showed a comprehensive approach to coastal defence and development, but with a still high pilot content. The design was assessed as too simple, and locally required institutional linkages and financial sustainability as only partly addressed, as indicated, inter alia, by cost underestimates. A site visit and interviews of stakeholders as part of the Indonesia country case study confirmed these findings. Useful progress was being made, local communities and the Indonesian authorities were enthusiastic, and the application of the approach was being considered at additional sites on the north Java coast. But the country case study characterised the work as action research. The optimum technical approach had not yet been conclusively identified.

RVO provided for comprehensive monitoring process involving all parties, but too many listed results had led to ticking the boxes instead of monitoring based on contents. Consolidated reports on progress and challenges, actions to be taken and lessons learned were found to be lacking. The reporting had not enabled IGG to learn at policy level (Van Woersem et al., 2016, p. ix).

The next activity, *Partners for Water*, formally falls outside the scope of this review, as it was not funded from MFA sources. Nevertheless, this MI&E-funded activity became a resource for intensification of development cooperation in water in partner countries through engaging the Dutch water sector. A short write up of the main findings on effectiveness and efficiency presented in the evaluation report on PvW Phase III is therefore presented below.

Title: Partners for Water

Evaluation report: evaluation Partners for Water 3 (Te Riele et al., 2016).

The MI&E-funded programme Partners for Water started as far back as 1999. It evolved into a programme for implementing Dutch interdepartmental water policy, including and increasingly in (former) partner countries for development cooperation. Phase 3 (2009-2015) was executed by RVO and NWP, commissioned by MI&E, also on behalf of MFA and MEA. PvW aimed at joining of forces to improve the international position of the Dutch water sector and in this way to contribute to solutions for world water problems (Te Riele et al., 2016, p. 4). The three components were: (1) stimulation (including subsidy facility World Wide Working with Water and a funding facility for commissions); (2) cooperation (country platforms and cross-country activities) and (3) communication/events. The total budget was EUR 57 million for five years; EUR 32 million for stimulation (EUR 18 million for subsidies, EUR 12.7 million for commissions); EUR 18 million for collaboration, among others via country platforms in the Netherlands and partner countries and cross-country activities. The balance was budgeted for communication, events/conferences and organisation costs. PvW 3 focused on 28 countries, including seven delta countries. Over the period covered, PvW

was particularly active in the recipient countries for development aid – Bangladesh, Indonesia, Kenya, Mali, Mozambique, Myanmar – and in former partner countries Colombia, Egypt and Vietnam.

Effectiveness

The Partners for Water evaluation conclusion on effectiveness was largely positive with respect to the joining of forces to improve the international position of the Dutch water sector. The report further stated that it was plausible that PvW, with different projects and activities, had contributed to offering solutions to world water problems. However, impact at the highest outcome level could not be determined for lack of a clear definition of 'world water problems' (Te Riele et al., 2016, p. 5). Perceptions on the contributions made to solutions varied, but the overall consensus was that PvW was a '*druppel op een gloeiende plaat*', meaning a small contributor. Critical notes, particularly from the side of NGOs, concerned worries about the appropriateness of Dutch solutions to local contexts and about increased dependency on Dutch assistance instead of the decrease in dependency that was aimed for (Te Riele et al., 2017, p. 84).

Reported success factors in the **subsidy component** of PvW included involvement and relations with recipient country governments and with local partners, insight in local markets, and involvement and expertise of RVO project advisers. Reported points of attention included the realisation that follow up of projects takes time; that legal frameworks are not always conducive to projects; that a focus on innovation may hamper up-scaling; and a lack of funding for follow up of projects; The programme was found by some respondents to be too supply-driven and not sufficiently focused on achievement of programme objectives or on contributing to solutions to water problems.

PvW **commissions** were found to have mostly contributed to programme objectives. Reported success factors include strategic collaboration with the government of the delta country; involvement of embassies; high level Dutch political support (such as through visits of the Minister of MI&E and prime Minister to Indonesia); creating in-country support for proposed (Dutch) solutions; and local support and ownership. The local context was stated to be the determining factor for the profiling of the Dutch sector. Main points of attention mentioned in the report were exchange of knowledge and experiences between delta teams; market orientation and attention for Dutch niches; financial and content support based on a long-term perspective; and the complexity of transition from an ODA context to a more economic relationship. The latter included the circumstance that various other countries continue to provide ODA, causing the lack of a level playing field. The report stated that continued GON financial support might be needed to sustain contacts and collaboration.

The number of participating organisations in the **country platforms** that were organised, involving interested organisations in the Netherlands, was reported to vary. The platform for Indonesia was the biggest, with 90 organisations, engaging about 500 people working for knowledge institutions and government, but also suppliers, contractors and small starters. The report pointed to a discrepancy of interests between the big players (knowledge

institutions, engineering consultants, contractors) and small enterprises, with the former having a long-term focus, being already active in a country and interested to join forces to expand contacts and portfolio; and the latter focusing on potential markets for products. The evaluation reported that participating organisations appreciated the country platforms as relatively neutral platforms where organisations could meet, discuss and explore opportunities for collaboration.

Efficiency

The evaluation was positive on the efficiency of PvW as well, pointing to the fact that investments in a target country take time, and that building and keeping up relations are important for the ultimate realisation of assignments. It pointed to numerous examples of big assignments that the Dutch water sector had obtained during the programme period in target countries (Te Riele et al., 2016, p. 5). Further, the report stated that there was broad consensus that the focus on a limited number of delta countries paid off. The delta approach with 'delta teams' facilitated coordination of initiatives, sharing of knowledge and input of knowledge from embassies, and was stated to be essential for achieving focus and coordination. The relative amount of funding for the cooperation component, one third of the budget, was found to be high (Te Riele et al., 2016, p. 5).

In three of the four partner countries for development aid selected for focused study by this review, PvW became an interface between the MFA aid policy and the broader Netherlands effort to support improved water management. It offered additional, flexible funding that could complement usually larger-scale, longer-term projects funded through the embassies' delegated budgets. It supported a shift in the character of development management and funding in these countries. In the hands of entrepreneurial managers in the 'delta teams' and more specifically the management teams coordinating these efforts, it facilitated relatively quick response to evolving challenges and needs, so that additional expertise and resources could be deployed in the short term. While these were important benefits, the process led to a fragmentation of the overall development effort and a weakening of reporting and performance assessment. As the country studies reviewed lists of the last ten years of PvW commissions (and subsidies) with Dutch informants, detailed investigation was needed to piece together a picture of what each of them was for and what it achieved. National informants had much less clarity. Not surprisingly, informants saw some of the PvW activities as very valuable, and some as having achieved virtually nothing.

Appreciation of stakeholders was on the whole positive, as PvW brought together Dutch players in the water sector, thus offering a stepping stone for application of innovations abroad. Some interviewees had commented, however, that the programme was only for the 'happy few' and did not support the whole sector (Te Riele et al., 2016, p. 83). Also, remarks were regularly made that it was difficult to continue subsidised projects after the pilot phase.

Title: Young Expert Programme

Evaluation report: mid-term review Young Expert Programme (YEP) Water 2016 (Spit et al., 2016).

The programme aimed to contribute to the continued availability of international professionalism and expertise in the water sector. It was a work and learning programme that provided Dutch and local young water professionals opportunities to gain professional expertise in an international development context. The programme aimed to admit 108 Dutch and 107 local experts over a five-year period. YEP Water was stated to be an answer to concerns expressed by the Dutch water sector that it would not be able to contribute to the Dutch water ambitions in the development context, as the sector lacked young talent and international development expertise (Spit et al., 2016, p. 6). The objectives of YEP are: building of international expertise among young high potentials in the sector; creating international opportunities for personal development; and set-up of a long presence in several countries by supporting sustainable networks and realising new opportunities for the Dutch economy and development cooperation (Spit et al., 2016, p. 8). The program offered 50% payment of costs of employment abroad at an internationally operating organisation such as a Dutch consultancy firm, NGO or Water Authority. In addition, training and coaching was provided for. At the time of the review, the programme was active in 31 countries and at 65 organisations (Spit et al., 2016, p. 26).

Effectiveness

The general conclusion of the external MTR was positive. The YEP was stated to address the human capital problem of the Dutch water sector in a direct way by building international experience among young potentials. Both the young experts and organisations appreciated the added value of YEP Water. The programme was performing in an excellent way and managed professionally (Spit et al., 2016, p. 66). Country informants were also generally positive about the contribution that the programme was making to capacity and to implementation in the fields where YEP personnel were working. The review report stated that it was harder to draw conclusions on the higher-level objective of setting up a longterm presence in several countries by supporting sustainable networks and realising new opportunities for the Dutch economy and development cooperation. The report further stated that it had not really become clear what the job opportunities for YEP alumni would be. On the one hand the number of bilaterally funded projects was decreasing and many organisations that were traditionally active in developing countries, especially NGOs, were downsizing or closing their doors. On the other hand, there were increasing job opportunities in Dutch-funded international organisations, and more water authorities and water companies were becoming active internationally (Spit et al 2016, p. 67). Nevertheless, the YEP programme made it easier for participants to be employed abroad. The added value for participating organisations was the financial aid as well as the training programme (Spit et al., 2016, p. 9).

Efficiency

The MTR report did not provide an assessment of the programme's efficiency. But it did offer some efficiency-related improvement suggestions, such as a more detailed time registration system for the programme bureau to seek for possibilities to make the programme more efficient (Spit et al., 2016, p. 12).

Annex 5 Evaluations of activities

Table V.1 Overview of evaluations of activities by policy theme				
Activity title	Budget holder	Reference	Туре	
Centrally funded activities – WMAg (total 6 activities)				
Agricultural Smallholder Adaptation Programme	DME	ODI, 2015. Adaptation for Smallholder Agriculture Programme (ASAP) – Progress Review.	MTR	
Water Grand Challenge: Securing Water for Food (SWFF)	DME	Björklund, G., Caplan, K., van Esbroeck, D., xxxx. Mid-term Review of Securing Water for Food, A Grand Challenge for Development.	MTR	
Centrally funded activities – (S)NWM (total 4 activities)				
A Programme for National IWRM and Water Efficiency Plans for 6 Countries in Africa	DME	Nilsson, A. and P. Walther, 2011. Global Water Partnership Strategy 2009 to 2013 Mid-Term Review. Ramböll	MTR	
Disaster Risk Reduction Team	DME	Krijnen, J.F.A., and J. Heun, 2016. Dutch Risk Reduction Team (DRR) – Mid-Term Review.	MTR	
Centrally funded activities – TWM (total 7 activities)				
Cooperation in International Water in Africa (CIWA)	DME	Pegasys, 2015. Mid-Term Review of the Cooperation in International Water in Africa (CIWA) Program.	MTR	
MEDRC Trilateral Courses Desalination and Reuse	DME	Saaf, E.J., 2016. Middle East Desalination Research Centre (MEDRC) – Evaluation. Leiden: SaafConsult B.V.	Final	
Nile Basin Initiative	DVF	Earle, A., Nordin, K., Cascao, A.E., Rukundu, D., Seide, W.M., Bjorklund, G., 2013. Independent Evaluation of the Nile Basin Trust Fund (NBTF). Stockholm: SIWI	Final	
SADC-Hydrological Cycle Observing System (HYCOS) Phase II	DME	Rhebergen, G.J., 2010. Evaluation of the SADC-HYCOS II Project.	Final	

Table V.1 Overview of evaluations of activities by policy theme					
Activity title	Budget holder	Reference	Туре		
Centrally funded activities – CCPT (total 8 activities)					
Adapting to Climate Change at the Local Scale (ADAPTS)	DME	Van Steenbergen, F., 2012. Evaluation Report ADAPTS. MetaMeta.	Final		
Least Developed Countries Fund for Climate Change (LDCF)	DME	ME GEF – Independent Evaluation Office, 2014. Adaptation to Climate Change – The Least Developed Countries Fund: Review of the Implementation of NAPAs.			
Water Integrity Network Strategy Implementation 2014-2016 in 5 Countries	DME	DME Ahlers, R. and W. Richert, 2015. Evaluation WIN Global Strategy 2011-2016.			
Centrally funded activities – AWM (total 26 activities)					
Additional Core Support to Global Water Partnership 2002	DML	IEG, 2010. Global Program Evaluation Global Water Partnership. Washington D.C.	Final		
		Gayfer, J., N. Hawkesworth, R. Hoare, J. Pierce, K. Sann, B. van Woersem, 2008. Global Water Partnership joint Donor External Evaluation. Sheffield, South Yorkshire: The Performance Assessment Resource Centre.	Final		
Aqua for All PPP Innovation Program	DME	Asselberg, K., K. Caplan, D. van Esbroeck, 2017. Mid-Term Evaluation of the Aqua for All PPP Innovation Programme.	MTR		
		Esbroeck, Van, D., K. Caplan, 2013. Midterm Evaluation of the Aqua for All Program (with a focus on the 2011-2013 period).	MTR		
Cap-Net Phase III: Capacity Building for Sustainable Development of Water Resources in a Context of Changing Climate	DME	Prasada Rao, K.B., G. Waako Katuramu, O. Chapeyama, H. Ur Rashid, 2014. Joint Donor Review Cap-Net Phase III. PEM Consult.	Final		
Global Water Partnership Core Funding	DME	Nilsson, A. and P. Walther, 2011. Global Water Partnership Strategy 2009 to 2013 Mid-Term Review. Ramböll	MTR		

Activity title	Budget holder	Reference	Туре
Global Water Partnership Strategy 2011-2013	DME	Nilsson, A. and P. Walther, 2011. Global Water Partnership Strategy 2009 to 2013 Mid-Term Review. Ramböll.	MTR
Improving the Performance of Water Resources Management in Latin America and the Caribbean	DML	Van Maanen, H.R.J., 2007. External Review of Fund Performance of the Inter-American Development Bank / Netherlands Water Partnership Program (INWAP). Supporting Water Resources Management in Latin America and the Caribbean. The Netherlands: Ministry of Foreign Affairs.	MTR
Intensivering Water OS DME 2011-2012	DME	Van de Putte, B. and P. Sijssens, 2017. Evaluation of the Water OS Programme.	Final
Programme Support to UNESCO-IHE	DME	Krijnen, J.F.A., and J. Heun, 2016. Dutch Risk Reduction Team (DRR) – Mid-Term Review.	MTR
Sustainable Water Fund I	DME	Woersem, van, B., J. Heun, K. Caplan, 2016. Sustainable Water Fund – Fonds Duurzaam Water – FDW, Mid Term Review.	MTR
Urbanising Deltas of the World	DME	COWATER, 2016. Mid-Term Review of the NWO-WOTRO Research Program on Urbanising Deltas of the World.	MTR
Water Financing Facility	DME	Everitt, R., I. Patron, 2015. Water Financing Partnership Facility – External Evaluation.	Final
		IED, 2010. ADB Evaluation Study Financing Partnership Facilities. Independent Evaluation Department of the Asian Development Bank.	Final
Water en Ontwikkelingssamenwerking Phase III (Water-OS-3)	DME	Van de Putte, B. and P. Sijssens, 2017. Evaluation of the Water OS Programme.	Final
Water Partnership Program Phase I 2009-2012	DVF	World Bank Group, 2014. Evaluation of the Reform Bank-Netherlands Partnership Program (BNPP). Washington D.C.: The World Bank Group.	Final
Water Partnership Program Phase II 2012-2016	DME	Universalia and Red2Red Consultores, 2017. Water Partnership Program Independent Review. Quebec: Universalia Management Group.	Final

Table V.1 Overview of evaluations of activities by policy theme						
Activity title	Budget holder	Reference	Туре			
WaterNet Phase II	DML	Pegasys, 2011. WaterNet: Internally-Commissioned External Review 2011. Pretoria, South Africa.	Final			
Young Expert Programme (YEP) Phase I	DME	Spit, J., R. Wielinga, H. Kloots, 2016. Mid-Term Review Young Expert Program (YEP) Water. Delft/Leeuwarden.	MTR			
Delegated activities – WMAg (total 23 activities)						
Appui au Budget du Programme d'Aménagement du Delta Intérieur du Niger Phase II (PADIN II)	BAM	Nelen, J., I. Barry, N.A. Cissé, A.O. Kergna, 2017. Evaluation à mi-parcours du Programme d'Aménagement du Delta Intérieur du Niger (PADIN-II). Amsterdam, The Netherlands.	MTR			
Blue Gold, Program for Integrated Sustainable Economic Development by Improving the Water and	DHA	Heun, J. and J.J. Kessler, 2016. Impact Evaluation of Dutch Food Security Program Country Study Bangladesh – Component Water Management.	Impact (IOB)			
Productive Sectors in Selected Polders		Van Steenbergen, F., C.M. Wijayaratna, W. Kabir, A.F.M. Saley, B. Lamoree, 2015. Aide Memoire – Mid Term Review Blue Gold Program (Updated).	MTR			
Contrat Plan 2005-2007 de l'Office du Niger	BAM	Sanogo, F.O., E.K. Dembele, D. Sogoba, M.D. Toure, M. Tangara, Y. Berthe, S.P. Sissoko, 2008. Evaluation du Contrat Plan 2005-2007 – Etat – Office du Niger – Exploitants Agricoles.	Final			
Fayoum Water Users' Organisation Project	KAI	Euroconsult Mott MacDonald, CBI and MDF, 2010. Fayoum Water Users Organisation Project – WUO Works – An Assessment of the Cost and Quality of Self-Financed Works by BCWUAs in Fayoum.	MTR			
Inner Delta Food Security, Resilience and Agricultural Water Management Program (PASARC)	BAM	Baltissen, G., B.W. Sanou, G.K. née Traoré, M.G. née Diallo, 2016. Evaluation à mi-parcours du Projet d'Appui à la Résilience des Populations aux Crises Climatiques et Sociales dans la Région de Mopti (PASARC-M).	MTR			
Integrated Irrigation Improvement and Management Project (IIIMP)	KAI	Abdulhamid, A. et al., 2012. Integrated Irrigation Improvement and Management Project – Mid-Term Review Mission. Aide-Memoire.	MTR			
		Euroconsult Mott MacDonald, MMD, CES, S&H and CBI, 2014. Impact Monitoring and Evaluation of IIIMP interim assessment of on-going activities.	MTR			

Activity title	Budget holder	Reference	Туре
Participatory Irrigation Sector Project (PISP)	JAK	Schenk, J. and Heun, J. 2017. Impact evaluation of two irrigation sector projects in Indonesia : Participatory Irrigation Sector Project (PISP, 2005-2012), and Water Resources and Irrigation Management Program (WISMP-1, 2003-2010; WISMP-2, 2012-ongoing). The Hague : IOB, MFA.	Impact
Small Scale Irrigation Farmers Field School (FFS) in Polders (SSIP)	DHA	Bell, R. and A.R. Anik, 2015. Final Term Review of the Enhancing Food Security through Improved Crop Water Management Practices in the Southern Coastal areas of Bangladesh.	Final
Small Scale Water Resources Sector Development Project (SSWRSDP) Phase II 2002-2008	DHA	Heun, J., 2009. Impact Evaluation Small Scale Water Resources Development Sector Project (SSWRDSP).	Impact
Delegated activities – (S)NWM (total 55 activities)			
Char Development and Settlement Project Phase III (CDSP III) (3 activities)	DHA	Alamgir, D.A.H., 2010. Evaluation of Impact of Three Phases of Char Development and Settlement Project (CDSP).	Impact
Char Development and Settlement Project Phase IV CDSP IV)	DHA	IFAD, 2015. Char Development and Settlement Project IV (CDSP IV) – Mid- Term Review Report. IFAD, Asia and Pacific Division, Programme Management Department.	MTR
Cooperation ARA Zambeze	МАР	Salomon Lda., 2017. GIRH – Desenvolvimento da ARA Zambeze – Programa de Cooperacao entre a ERBP e a ARA-Zambeze – Revisão de Meio-Termo. Maputo, Mozambique.	MTR
Formulation of the Bangladesh Delta Plan 2100 (BDP 2100)	DHA	Unknown, 2015. The Formulation of the Bangladesh Delta Plan 2100 – Mid-Term Review. Dhaka, Bangladesh.	MTR
Indus for All Programme	ISL	Giesen, W., 2012. External Monitoring & Evaluation of the Indus for All Programme (IFAP) – Pakistan. Arnhem, The Netherlands: Euroconsult Mott MacDonald.	Final

Table V.1 Overview of evaluations of activities by policy theme					
Activity title	Budget holder	Reference	Туре		
Integrated Planning for Sustainable Water Management (IPSWAM) Technical and Financial	DHA	EKN and BWDB, 2011. Integrated Planning for Sustainable Water Management (IPSWAM). Evaluation report. Dhaka: EKN and BWDB.	Final		
Assistance		Bangladesh Academy for Rural Development, 2009. Socio-economic impact assessment of IPSWAM polders in southern and south-western zones of Bangladesh. Dhaka: IPSWAM Technical Report 16.	Impact		
		Uddin, M.S. and Van de Putte, R.A., 2007. Integrated Planning for Sustainable Water Management (IPSWAM). Report of the 3rd annual review and mid-term review mission. Dhaka: EKN.	MTR		
Integrated Water Resource Action Plan Programme (IWRAP)	NAI	Githaiga, J.M. and M. Mutonga, 2015. Mid term Evaluation Integrated Water Resource Action Plan Programme (IWRAP) in Naivasha, Kenya.	MTR		
Jakarta Coastal Development Program: Master Planning Phase	JAK	Kok, M., N. Yuwono, A. Wurjanto, P. Dirckle, G. Lukito, T. Wouterse., 2014. End of Project review NCICD Masterplanning phase.	Final		
Natural Disaster Risk Management Program (NDRMP)	HAN	Kodderetzsch, S. et al., 2008. Natural Disaster Risk Management Program (Phase I) (NDRMP I) – Mid-Term Review Mission. Aide Memoire.	MTR		
Pilot Urban Dredging Project Dhaka	DHA	Choudhury, A.Q. and M. Blokland, 2015. Urban Drainage Demonstration Project (UDDP) Partnership of Dhaka WASA and VEI Mid Term Review. Blokland Advisory Services.	MTR		
Program for the Water Sector between South Sudan and the Netherlands (ProWaS/SSN) Water for Eastern Equatoria State (EES)	JBA	CDP, 2016a. Mid-Term Evaluation of the Programme for the Water Sector between South Sudan and The Netherlands (ProWaS/SSN) – Water for Eastern Equatoria. Utrecht, The Netherlands: Consultants for Development Programmes.	MTR		

Table V.1 Overview of evaluations of activities by policy theme					
Activity title	Budget holder	Reference	Туре		
Program for the Water Sector between South Sudan and the Netherlands (ProWaS/SSN) Water for Lakes State (Lakes)	JBA	CDP, 2017. Update to the Mid Term Evaluation of the Programme for the Water Sector between South Sudan and The Netherlands (ProWaS/SSN) – Water for Lakes State. Utrecht, The Netherlands: Consultants for Development Programmes.	MTR		
		CDP, 2016b. Mid-Term Evaluation of the Programme for the Water Sector between South Sudan and The Netherlands (ProWaS/SSN) – Water for Lakes State. Utrecht, The Netherlands: Consultants for Development Programmes.	MTR		
Programme Pluriannuel d'Appui au Secteur de l'Eau et de l'Assainissement Phase II (PPEA II) – Gestion Intégree des Ressources en Eau (2 activities)	СОТ	Unknown, 2016. Évaluation externe du Programme Pluriannuel Eau et Assainissement phase II (PPEA II / 2012-2015) au Bénin.	Final		
Sectoral Support to the Water Sector in Mozambique Phase V (ASAS V)	МАР	Act-for-Perfomance, 2016. Mid-Term Review and Value-for-Money study of the Apoio Sectoral au Sector de Aguas (ASAS) program. Ede, Netherlands: Act-for-Performance BV.	MTR		
South West Area integrated Water Resources Planning and Management Project (SWAIWRPMP)	DHA	IMED, 2014. Mid-Term Evaluation Report on the titled project South-West Integrated Water Resources Planning & Management Project. Government of the People's Republic of Bangladesh, Ministry of Planning, Implementation, Monitoring and Evaluation Division.	MTR		
Water Resources and Irrigation Sector Management Program (WISMP)	JAK	Schenk, J. and Heun, J. 2017. Impact evaluation of two irrigation sector projects in Indonesia : Participatory Irrigation Sector Project (PISP, 2005-2012), and Water Resources and Irrigation Management Program (WISMP-1, 2003-2010; WISMP-2, 2012-ongoing). The Hague : IOB, MFA.	Impact (IOB)		
Water Sector Support Programme (WSSP)	SAA	Negewo, B.D. et al., 2010. Republic of Yemen Water Sector Support Programme (WSSP) – Joint Review Mission of The World Bank, the German Development Cooperation, and Embassy of the Kingdom of the Netherlands in coordination with the Government of Yemen.	MTR		

Activity title	Budget holder	Reference	Туре		
Delegated activities – TWM (total 12 activities)	Juagetholder				
Dialogue for Sustainable Management of Trans- Boundary Water Regimes in South Asia: A Bangladesh-India Initiative	DHA	HA Glaholt, R., J. Gonsalves, D. Macintosh, 2014. Ecosystems for Life: A Bangladesh-India Initiative – External Review Report.			
Mekong River Commission's Flood Management and Mitigation Programme (MRC FMMP)	HAN	AN Woersem, van, B.L.M. and C. Joy, 2009. Flood Management and Mitigation Program – Final Report of the 2009 Review Mission. Phnom Penh, Cambodia.			
Organisation pour la Mise en Valeur du Fleuve Sénégal (OMVS) – Trustfund II	DAK	Lanser, P., E. Zigterman, A. Guisset, 2013. Evaluation des Phases 1 et 2 du projet GIRE Trustfund Grandes lignes pour la Phase 3 – Rapport de Mission de Revue des Acquis.	Final		
Programme Gestion Intégrée des Ressources en Eau du Niger Supérieur Phase II (GIRENS II)	BAM Hansen, B., A. Goita, K. Gbonimy, 2010. Evaluation de la phase II du Projet de Gestion Intégrée des Ressources en Eau Niger Superieur (GIRENS2).		Final		
Delegated activities – CCPT (total 6 activities)					
Sustainable Landscapes and Livelihoods	NAI	Zeverijn, A., P. Osano, 2013. Frontiers and Challenges – High Level Evaluation of EKN Funded Interventions in the Arid and Semi-Arid Lands of Kenya. Netherlands: Zeverijn & Co.			
Sustainable Water, Land and Natural Resource Management for Human and Economic Benefit in Kenya	NAI	Zeverijn, A., P. Osano, 2013. Frontiers and Challenges – High Level Evaluation of EKN Funded Interventions in the Arid and Semi-Arid Lands of Kenya. Netherlands: Zeverijn & Co.	MTR		
United Nations Development Programme Wetlands Project	ISL	Rao, A.L., 2009. Protection and Management of Pakistan Wetlands – Mid Term Review.	MTR		
Delegated activities – AWM (total 15 activities)					
Joint Cooperation Programme Phase II	JAK	IJzermans, S., 2017. Indonesia – Netherlands Joint Cooperation Program. Evaluation Report. WaterPartner	Final		

Table V.1 Overview of evaluations of activities by policy theme						
Activity title	Reference	Туре				
Programme Pluriannuel d'Appui au Secteur de l'Eau et de l'Assainissement Phase II (PPEA II) – Missions	СОТ	Unknown, 2016. Évaluation externe du Programme Pluriannuel Eau et Assainissement phase II (PPEA II / 2012-2015) au Bénin.	Final			
WaterNet Phase IIB – Human Capacity Building in Integral Water Resources Management	МАР	Pegasys, 2011. WaterNet: Internally-Commissioned External Review 2011. Pretoria, South Africa.	MTR			
WaterNet Phase III	МАР	Enviroplan (Pty) Ltd, 2015. Mid-Term Evaluation of Water-Net Programme – Phase III. Tlokweng, Botswana.	MTR			

Annex 6 List of interviewees

Table VI.1 List of	Table VI.1 List of interviewees						
Name	Sex	Position	Organisation	Location	Type of organisation		
Abla, I.	м	Water Specialist	World Bank	Jakarta, Indonesia	Multilateral organisation		
Adema, D.	М	Senior Policy Adviser Water, Department Inclusive Green Growth	MFA-NL	The Netherlands	Donor government		
Adhikari, S.P.	м	Chief Engineer	Local Government Engineering Department	Dhaka, Bangladesh	Recipient government		
Agus, L.	F	Employee Extension Division	Agriculture Agency	Demak, Indonesia	Recipient government		
Ahamed, M.	м	Chief Water Management	Bangladesh Water Development Board	Dhaka, Bangladesh	Recipient government		
Ahmad, Z.U.	Μ	Team Leader Water Resources Management	ADB – Bangladesh Resident Mission	Dhaka, Bangladesh	Multilateral organisation		
Ahmed, I.	м	Additional Chief Engineer	Local Government Engineering Department	Dhaka, Bangladesh	Recipient government		
Akhter, T.	F	Senior Socio-Economist	Blue Gold	Khulna, Bangladesh	Recipient government		
Alaerts, G.J.	Μ	Professor of Knowledge and Capacity Development	UNESCO-IHE – Integrated Water Systems and Governance Department	Jakarta, Indonesia	Knowledge Institution		
Alam, K.	М	Assistant Country Director	UNDP	Dhaka, Bangladesh	Multilateral organisation		
Alam, M.K.	М	Assistant Country Director Climate Change, Environment, Energy and Disaster	World Bank	Dhaka, Bangladesh	Multilateral organisation		
Alam, M.S.	М	Senior Secretary	General Economics Division – Planning Commission	Dhaka, Bangladesh	Recipient government		
Albrecht, M.B.	м	Water Specialist	World Bank	Jakarta, Indonesia	Multilateral organisation		
Aleobua, B.	М	Water and Sanitation Engineer	African Development Bank	Maputo, Mozambique	Multilateral organisation		

Table VI.1 List of interviewees						
Name	Sex	Position	Organisation	Location	Type of organisation	
Al-Fayyaz, T.A.	М	Executive Engineer	Bangladesh Water Development Board	Dhaka, Bangladesh	Recipient government	
Ali, M.	Μ	Director GIS Division	Centre for Environmental and Geographic Information Services	Dhaka, Bangladesh	Knowledge Institution	
Ali, M.R.	М	Deputy Chief (Fish)	Bangladesh Water Development Board	Dhaka, Bangladesh	Recipient government	
Ambarsari, F.D.	F	Head of Division International Co-operation	Ministry of Public Works and Housing	Jakarta, Indonesia	Recipient government	
Aoki, H.	М	Deputy Resident Representative	Japan International Cooperation Agency (JICA)	Maputo, Mozambique	Donor government	
Aquinao, F.	М	Staff, Directorate of Irrigation and Agriculture	Ministry of Agriculture	Jakarta, Indonesia	Recipient government	
Aristóteles, P.	Μ	Technician	Ministry of Economics and Finance	Maputo, Mozambique	Recipient government	
Arsa I, K.	Μ	Head of Irrigation and Raw Water Division	Water Resources and Spatial Planning Agency	Central Java Province, Indonesia	Recipient government	
Ayuk	F		Bappeda	Semarang City, Indonesia	Recipient government	
Azdan, D.	М	Director Water Resources	Bappenas – Ministry of National Development Planning	Jakarta, Indonesia	Recipient government	
Azzaino, Z.	М	Deputy Director Strategic Planning	Ministry of Public Works and Housing	Jakarta, Indonesia	Recipient government	
Bagus	М		Ministry of Maritime Affairs and Fisheries	Jakarta, Indonesia	Recipient government	
Bakker, G.	Μ	Core adviser Water Aid and Development Programme	Embassy of the Kingdom of the Netherlands	Maputo, Mozambique	Donor government	
Banze, H.	Μ	Director	ARA-Sul	Maputo, Mozambique	Recipient government	
Barnard	М		Ministry of Maritime Affairs and Fisheries	Jakarta, Indonesia	Recipient government	

Table VI.1 List of in	Table VI.1 List of interviewees					
Name	Sex	Position	Organisation	Location	Type of organisation	
Bastemeijer, T.	М	Chief advisor strategic outreach and programmes	Water Integrity Network (WIN)	The Netherlands	Network	
Batubara, R.M.S.	М	Director, Coastal and Small Islands	Ministry of Maritime Affairs and Fisheries	Jakarta, Indonesia	Recipient government	
Bawa, J.A.	М	Head of Technical Planning Irrigation Section	Ministry of Public Works and Housing	Grobogan District, Indonesia	Recipient government	
Bengaly, K.	М	Onion specialist, Programme de Renforcement des Chaînes de valeur Agricoles pour la Sécurité Alimentaire (PRCA-SA)	ICCO	Bamako, Mali	NGO	
Bentvelsen, K.	F	Gender Expert Blue Gold Project	Femconsult Consultants on Gender and Development	Dhaka, Bangladesh	Private organisation	
Berge, N. van den	М	Outcome Monitoring Specialist	Blue Gold Project	Dhaka, Bangladesh	Recipient government	
Blüm, L.	F	First Secretary Economic and Political Affairs	Embassy of the Kingdom of the Netherlands	Dhaka, Bangladesh	Donor government	
Boissevain, W.	м	Country Co-ordinator Indonesia	Mott Macdonald	Jakarta, Indonesia	Private organisation	
Boubacar, Y.	М	National Director, National Directorate of Water	Ministry of Energy and Water (MEE)	Bamako, Mali	Recipient government	
Braam, L.	м		Rebel Group	Jakarta, Indonesia	Private organisation	
Breman, H.	М	Consultant in environment and development	Consultant	The Netherlands	Private organisation	
Brilliyan, P.	F	Head of Section 1, Sub Directorate Hydrology, Directorate WRM	Ministry of Public Works and Housing	Jakarta, Indonesia	Recipient government	
Brinkman, J.J.	м		Deltares	Jakarta, Indonesia	Knowledge Institution	
Bruijne, J. de	F	Consultant, IWRM	Mott MacDonald	Arnhem, NL	Private organisation	
Budiman	М		Ministry of Maritime Affairs and Fisheries	Indonesia	Recipient government	

Table VI.1 List of inte	Table VI.1 List of interviewees					
Name	Sex	Position	Organisation	Location	Type of organisation	
Camara, B.	М	Director General	Agency for Environment and sustainable Development (AEDD)	Bamako, Mali	Recipient government	
Carmo Vaz, A.	М	Consultant	Consultec	Maputo, Mozambique	Private organisation	
Chiburre, J.	М	Project manager E-Flows project	Sustain Africa	Zambia	NGO	
Choudhury, G.	М	Deputy Team Leader	Bangladesh Delta Plan 2100 Formulation Project	Dhaka, Bangladesh	Recipient government	
Chowdhury, A.	м	Deputy Team Leader	Blue Gold Project	Dhaka, Bangladesh	Recipient government	
Chowdhury, M.R.A.	М	Executive Engineer, Planning-2	Bangladesh Water Development Board	Dhaka, Bangladesh	Recipient government	
Coenen, V.	М	Director	Witteveen & Bos	Jakarta, Indonesia	Private organisation	
Coulibaly, C.Y.	F	Head, IWRM Management Unit, National Directorate of Water (DNH)	Ministry of Energy and Water (MEE)	Bamako, Mali	Recipient government	
Covele, O.C.	F	Technician	Ministry of Economics and Finance	Maputo, Mozambique	Recipient government	
Culenaere, L.M.	F	Ambassador	Embassy of the Kingdom of the Netherlands	Dhaka, Bangladesh	Donor government	
Custodio, V.	М	Director	ARA-Zambeze	Tete, Mozambique	Recipient government	
Damenta	М	Head, Sub Directorate Public Works, Directorate General Regional Development	Ministry of Home Affairs	Jakarta, Indonesia	Recipient government	
Darsono, S.	М	Head	Managing Organization for Banger Polder SIMA	Semarang, Indonesia	Recipient government	
Das, B.	М	Programme Coordinator Bangladesh	Water Integrity Network (WIN)	Dhaka, Bangladesh	Network	

Table VI.1 List of in	terviewe	es			
Name	Sex	Position	Organisation	Location	Type of organisation
Debnath, G.K.	М	Project Director, Small-Scale Water Resources Sector Development Project -Japan International Cooperation Agency (JICA)	Local Government Engineering Department	Dhaka, Bangladesh	Recipient government
Dembele, P.	М	Executive Secretary	Sahel Eco	Bamako, Mali	NGO
Dème, Y.	Μ	Country Director and Regional Programme Coordinator, Mali/ Senegal	Near East Foundation	Bamako, Mali	NGO
Dewi, R.	F	Head of Section, Coastal	Ministry of Public Works and Housing	Jakarta, Indonesia	Recipient government
Diabaté, M.	Μ	Executive Director	Malian Association for the Environmental Development of the Sahel (AMPRODE/ SAHEL)	Bamako, Mali	NGO
Diallo, Y.	М	Specialist, WASH in Institutions	UNICEF	Bamako, Mali	Multilateral organisation
Didik, F.	М		Wetlands International	Indonesia	NGO
Diest, W. van	М	Independent consultant	Consultant	Jakarta, Indonesia	Private organisation
Dijk, J.A. van	М	Business Director a.i.	UNESCO-IHE	Delft, The Netherlands	Knowledge Institution
Djono	М	Head of Section Extension – Agriculture	Ministry of Public Works and Housing	Grobogan District, Indonesia	Recipient government
Dobbelaar, P.	F	Chief Technical Adviser, IWRM	Ministry of Water and Energy	Bamako, Mali	Recipient government
Dody	М		Ministry of Public Works and Housing	Semarang City, Indonesia	Recipient government
Dopp, S.	F	Project Coordinator Urbanising Deltas of the World (UDW),	Netherlands Organisation for Scientific Research (NWO)	The Hague, The Netherlands	Knowledge Institution
Dos Santos Jose, E.	F	Deputy National Director of Treasury	Ministry of Economics and Finance	Maputo, Mozambique	Recipient government

Table VI.1 List of inte	Sex	Position	Organisation	Location	Type of organisation
Douven, W.	M	Co-ordinator DGIS-Programmatic Co-operation, UNESCO-IHE, NL and Project Leader of UDW Research Project 'Strategic Delta Planning Processes in Bangladesh, NL, Vietnam and beyond'	UNESCO-IHE	Delft, The Netherlands	Knowledge Institution
Driel, A. van	F	First Secretary for Water and Sanitation	Embassy of the Kingdom of the Netherlands	Maputo, Mozambique	Donor government
Duewel, J.	Μ	Team Leader IDPM, Water Resources and Irrigation Sector Management Program (Irrigation Sector Management Program (WISMP II)	World Bank	Indonesia	Multilateral Organisation
Eijk, P. van	М		Wetlands International	The Netherlands	NGO
Eko Budi Priyanto, E.B.	М		Wetlands International	Indonesia	NGO
Eljihadi, S.	М	Consultant	Ministry of Home Affairs	Indonesia	Recipient government
Endang Sw, C.	F	Extension	Ministry of Public Works and Housing	Demak, Indonesia	Recipient government
Ernis	М		Ministry of Public Works and Housing	Indonesia	Recipient government
Faired, D.	М	Head, Section 1, Sub Directorate Public Works, Directorate General Regional Development	Ministry of Home Affairs	Jakarta, Indonesia	Recipient government
Farhad, N.	М	Adviser, Political Affairs	Embassy of the Kingdom of the Netherlands	Dhaka, Bangladesh	Donor government
Feltmann, M.	F	NWP coordinator Mozambique	Netherlands Water Partnership (NWP)	The Hague, The Netherlands	Network
Figuères, C.	F	Key Adviser on IWRM to the Embassy of the Kingdom of the Netherlands Bamako, Mali	Consultant	The Netherlands	Private organisation

Table VI.1 List of interviewees					
Name	Sex	Position	Organisation	Location	Type of organisation
Frenkel, R.	М	Team Leader	Triple-A Team	Jakarta, Indonesia	Private organisation
Gareyane, M.	М	Programme Officer	Wetlands International	Mali	NGO
Gischler, M.	М	Senior Policy Adviser Water, Department Inclusive Green Growth	MFA-NL	The Hague, The Netherlands	Donor government
Golam, M.S.L.	М	Director, Remote Sensing	Centre for Environmental and Geographic Information Services	Dhaka, Bangladesh	Knowledge Institution
Grashoff, P.	М	Spatial Planning Engineer Irrigation Sector Management Program (WISMP II)	World Bank	Indonesia	Multilateral organisation
Gravata, A.M.	М	Technician	Ministry of Economics and Finance	Maputo, Mozambique	Recipient government
Greenberg, S.	М	WASH specialist	UNICEF	Mali	Multilateral organisation
Groot, C de	М	First Secretary for Water Management, EKN, Indonesia and former First Secretary, EKN, Dhaka, Bangladesh	Embassy of the Kingdom of the Netherlands	Jakarta, Indonesia	Donor government
Grotenhuis, P.	F	Ambassador,	Embassy of the Kingdom of the Netherlands	Maputo, Mozambique	Donor government
Halm, P.	М	Executive Director	Indonesia Water Partnership (INA)	Indonesia	Private organisation
Hanandaja, S.	Μ	Head of Sub Directorate Regulation, Directorate WRM	Ministry of Public Works and Housing	Jakarta, Indonesia	Recipient government
Handayani, S.	F	Former Head	Bappeda, Special Capital City District of Jakarta	Jakarta, Indonesia	Recipient government

Table VI.1 List of int	erviewe	es			
Name	Sex	Position	Organisation	Location	Type of organisation
Haque, A.M.A.	Μ	Project Director, Flood and Riverbank Erosion Risk Management Investment Program (FRERMIP)	Bangladesh Water Development Board	Dhaka, Bangladesh	Recipient government
Haque, M.A.	М	Adviser, Water Resources and Power Management	Centre for Environmental and Geographic Information Services	Dhaka, Bangladesh	Knowledge Institution
Haque, S.	М	Superintending Engineer	Local Government Engineering Department	Dhaka, Bangladesh	Recipient government
Haren, I. van	М	Director	We Consult	Maputo, Mozambique	Private organisation
Hartono, S.	М		Marine Agency	Demak District, Indonesia	Recipient government
Hasan, A.K.M.	М	Director, Database, ICT and System Management Division	Centre for Environmental and Geographic Information Services	Dhaka, Bangladesh	Knowledge Institution
Hasan, Z.R.	М	Country Manager	Solidaridad	Dhaka, Bangladesh	NGO
Heden, C. van der	М	Country Coordinator Mozambique Partners voor Water	Netherlands Enterprise Agency (RVO)	The Hague, The Netherlands	Donor government
Heer, J.M. de	М	Team Leader Bangladesh Delta Plan 2100 Formulation Project	Twynstra Gudde	The Netherlands	Private organisation
Helmer, J.	М		Hoogheemraadschap Schieland en Krimpenerwaard	Rotterdam, The Netherlands	Donor government
Hermajanda, D.	М	Co-Team Leader, Irrigation Sector Management Program (WISMP II)	World Bank	Indonesia	Multilateral organisation
Hermawan , D.	М	Improvement of Participatory Irrigation Management (IoPIM) – Irrigation Sector Management Program (WISMP II)	World Bank	Semarang, Indonesia	Multilateral organisation

Table VI.1 List of in	Table VI.1 List of interviewees					
Name	Sex	Position	Organisation	Location	Type of organisation	
Herwindo, W.	Μ	Sub Head, Division Dissemination and Co-operation,	Ministry of Public Works and Housing	Jakarta, Indonesia	Recipient government	
Heun J.	М	Consultant and former Programme Director DUPC at UNESCO-IHE	Consultant	The Netherlands	Private organisation	
Hijkoop, J.	Μ	Senior Policy Adviser Food Security, Department Inclusive Green Growth	MFA-NL	The Hague, The Netherlands	Donor government	
Hiruzzaman, M.	М	Deputy Secretary	MWR	Dhaka, Bangladesh	Recipient government	
Hoogveld, F.	М	First Secretary	Embassy of the Kingdom of the Netherlands	Bamako, Mali	Donor government	
Horn, P. van den	М	Programme Manager International	Netherlands Water Partnership (NWP)	The Hague, The Netherlands	Network	
Horst, A. van der	Μ	Senior Policy Adviser Water, Department Inclusive Green Growth	MFA-NL	The Hague, The Netherlands	Donor government	
Hossain, M.A.	М	Programme Co-ordinating Director, Bangladesh Delta Plan 2100	Bangladesh Water Development Board	Dhaka, Bangladesh	Recipient government	
Hossain, M.J.	М	Adviser, Water Resources Management	Centre for Environmental and Geographic Information Services	Dhaka, Bangladesh	Knowledge Institution	
Hossain, M.M.	М	Executive Director	Institute of Water Modelling	Dhaka, Bangladesh	Knowledge Institution	
Hossain, M.S.	М	Adviser	Centre for Environmental and Geographic Information Services	Dhaka, Bangladesh	Knowledge Institution	
Hossain, S.	М	Community Orientation Expert	Blue Gold	Dhaka, Bangladesh	Recipient government	
Howlader, D.	М	Sub-Divisional Engineer, Dumuria O&M Sub-Division	Bangladesh Water Development Board	Khulna, Bangladesh	Recipient government	
Huesken, J.	м	Deputy Chief of Mission	Embassy of the Kingdom of the Netherlands	Pretoria, South Africa	Donor government	

Table VI.1 List of interviewees						
Name	Sex	Position	Organisation	Location	Type of organisation	
Hukom, C.	F	Programme Officer (Water Management)	Embassy of the Kingdom of the Netherlands	Jakarta, Indonesia	Donor government	
Hunger, G.	М	Project Co-ordinator (AMC – Climate Change Adaptation)	German Agency for International Cooperation (GIZ)	Maputo, Mozambique	Donor government	
Huq, M.	м	Environmental Adviser	Centre for Environmental and Geographic Information Services	Dhaka, Bangladesh	Knowledge Institution	
Huthoff, F.	М	Technical and strategic adviser to National Directorate of Water Resource Management (DNGRH)	НКV	Maputo, Mozambique	Private organisation	
Inamori, M.	F	Project Formulation Adviser (Environment, Water Resource Management, Natural Disaster Management)	Japan International Cooperation Agency (JICA)	Maputo, Mozambique	Donor government	
Irvan AB, A.	М		Blue Forest	Demak, Indonesia	NGO	
Islam, A.	М	Consultant, Preparation of National Adaptation Plan	UNDP	Dhaka, Bangladesh	Multilateral organisation	
Islam, A.K.M.T.	М	Director, Planning-2	Bangladesh Water Development Board	Dhaka, Bangladesh	Recipient government	
Islam, M.A.	М	Civil Engineer, Water Infrastructure	Blue Gold	Khulna, Bangladesh	Recipient government	
Islam, M.A.	М	Project Director/Senior Engineer (South West),	Bangladesh Water Development Board	Dhaka, Bangladesh	Recipient government	
Islam, M.R.	М	Consultant, Agriculture Global Practice,	World Bank	Dhaka, Bangladesh	Multilateral organisation	
Islam, S.	М	Assistant Chief (Sociology),	Bangladesh Water Development Board	Dhaka, Bangladesh	Recipient government	
Islam, S.	М	Executive Director, Khulna O&M Division 1	Bangladesh Water Development Board	Khulna, Bangladesh	Recipient government	

Table VI.1 List of inter	viewe	es			
Name	Sex	Position	Organisation	Location	Type of organisation
Islam, S.M.N.	М	Project Director, Small-Scale Water Resources Sector Development Project (SSWRSDP)	Local Government Engineering Department	Dhaka, Bangladesh	Recipient government
Izhar, F.	М		Special Capital City District of Jakarta	Jakarta, Indonesia	Recipient government
Jansen, H.	М	Former WRM specialist	Embassy of the Kingdom of the Netherlands	Maputo, Mozambique	Donor government
Jenkins, A.	М	Donor Liaison Office, Impact Assessment Unit	BRAC	Dhaka, Bangladesh	NGO
Jones, G.	М	Team Leader	Blue Gold Project	Dhaka, Bangladesh	Recipient government
Jordão, C.	F	Senior Policy Officer for Sustainable Development	Embassy of the Kingdom of the Netherlands	Maputo, Mozambique	Donor government
Juizo, D.	М	Consultant, Solomon; Lecturer	Eduardo Mondlane University	Maputo, Mozambique	Knowledge Institution
Kabir, M.H.	М	Monitoring and Evaluation Officer	Blue Gold Project (DAE component)	Bangladesh	Recipient government
Kane, S.	М	Country Manager	Eau Vive Internationale	Mali	NGO
Kansaye, K.D.	F	Information and Communications Officer, National Directorate of Water (DNH)	Ministry of Energy and Water (MEE)	Bamako, Mali	Recipient government
Karim, M.M.	М	Chief Extension Officer	Bangladesh Water Development Board	Dhaka, Bangladesh	Recipient government
Karim, M.R.	М	Project Director, Char Development and Settlement Project (CDSP IV)	Local Government Engineering Department	Dhaka, Bangladesh	Recipient government
Karyoso	М		Blue Forest	Indonesia	NGO
Keita, K.	М	National Co-ordinator	Wetlands International	Mali	NGO
Kela, G.	М	Consultant	Ministry of Home Affairs	Jakarta, Indonesia	Recipient government
Khaleduzzaman, A.T.M.	М	Senior Adviser, Water Management	Embassy of the Kingdom of the Netherlands	Dhaka, Bangladesh	Donor government

Table VI.1 List of inte	Table VI.1 List of interviewees					
Name	Sex	Position	Organisation	Location	Type of organisation	
Khalequzzaman, K.	М	Chief, Planning	Bangladesh Water Development Board	Dhaka, Bangladesh	Recipient government	
Khan, A.S.	М	Deputy Executive Director	Institute of Water Modelling	Dhaka, Bangladesh	Knowledge Institution	
Khan, M.F.A.	М	Deputy Executive Director	Centre for Environmental and Geographic Information Services	Dhaka, Bangladesh	Knowledge Institution	
Khan, S.I.	М	Senior Programme Officer, Enhancing Resilience (ER), Programme Planning and Implementation Section	World Food Programme	Dhaka, Bangladesh	Multilateral Organisation	
Khan, Z.A.	М	Senior Secretary	Ministry of Water Resources	Dhaka, Bangladesh	Recipient government	
Khanam, M.	F	Senior Adviser, Economic and Commercial Affairs	Embassy of the Kingdom of the Netherlands	Dhaka, Bangladesh	Donor government	
Kifli, N.F.	F	Head of Division Standardisation and Co-operation	Ministry of Public Works and Housing	Indonesia	Recipient government	
Kileshye Onema, J.M.	М	Network manager	WaterNet	Botswana	Network	
Kismiwati, E.	F	Extension	Ministry of Public Works and Housing	Demak, Indonesia	Recipient government	
Klaassen, I.	F	NWP coordinator Indonesia	Netherlands Water Partnership (NWP)	The Hague, The Netherlands	Network	
Kleijn, J.	м	Senior Policy Adviser Water, Department Inclusive Green Growth	MFA-NL	The Hague, The Netherlands	Donor government	
Klink, M.	М	Senior Economic Policy Adviser	Embassy of the Kingdom of the Netherlands	Jakarta, Indonesia	Donor government	
Koucou, G.Y.V.	М	Fish production specialist, Programme de Renforcement des Chaînes de valeur Agricoles pour la Sécurité Alimentaire (PRCA-SA)	ICCO	Mali	NGO	

Table VI.1 List of i	nterviewe Sex	Position	Organisation	Location	Type of organisation
Krieken, K. van	F	Department for Water and Sanitation	Embassy of the Kingdom of the Netherlands	Maputo, Mozambique	Donor government
Kroon, J.	М	Partners voor Water Bangladesh	Netherlands Enterprise Agency (RVO)	The Hague, The Netherlands	Donor government
Kuijper, B.	М	Deputy Operations Director	Cornelder (Beira Port)	Beira, Mozambique	Private organisation
Kuijpers, A.	М		Wetterskip Fryslân	Leeuwarden, The Netherlands	Donor government
Kun A, L.	F	Head of Division Extension – Agriculture	Ministry of Public Works and Housing	Grobogan District, Indonesia	Recipient government
Kundu, P.J.	М	Executive Director, Khulna O&M Division 2	Bangladesh Water Development Board	Khulna, Bangladesh	Recipient government
Kusumawati, T.	F	Head	Bappeda Special Capital City District of Jakarta	Jakarta, Indonesia	Recipient government
Kuswantoro	м		Wetlands International	Indonesia	NGO
Lamoree, B.	М	Consultant: Core adviser Bangladesh and Mozambique	Netherlands Enterprise Agency (RVO) and Netherlands Water Partnership (NWP)	Maputo, Mozambique	Donor government
Langeveld, P.	М	Policy adviser Dutch Water Authorities and Programme Manager	Nederlandse Waterschapsbank N.V. Fund (NWB Fund)	The Hague, The Netherlands	Donor government
Lawira, H.	F	Project Officer (Water Sector)	ADB	Jakarta, Indonesia	Multilateral organisation
Letitre, P.	М	Deltares Representative in Indonesia	Deltares	Jakarta, Indonesia	Knowledge Institution
Ligtvoet, W.	М	Department of Water, Agriculture and Food	Netherlands Environmental Assessment Agency (PBL)	The Hague, The Netherlands	Donor government
Linden, I van der	М	NWP coordinator Indonesia	Netherlands Water Partnership (NWP)	The Hague, The Netherlands	Network
Table VI.1 List of int	Table VI.1 List of interviewees				
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Name	Sex	Position	Organisation	Location	Type of organisation
Macaringue, M.J.	М	President of The Board	Plataforma Moçambicana de Água (PLAMA)	Maputo, Mozambique	Network
Macie, M.	М	National Director	National Directorate of Water Resource Management (DNGRH)	Maputo, Mozambique	Recipient government
Maïga, H.A.	М	Honorary Chair	Mali National Water Partnership	Mali	Network
Mak, W.	М	Program Manager International Water Affairs	Ministry of Infrastructure and Environment	The Hague, The Netherlands	Donor government
Mandal, M.	М	Staff Officer to Chief Engineer	Local Government Engineering Department	Dhaka, Bangladesh	Recipient government
Marerua, F.	Μ	Former Country Director WWF in Mozambique and Policy and Partnership Advisor Coastal East Africa based in Dar es Salaam, Tanzania	World Wide Fund for Nature (WWF)	Dar es Salaam, Tanzania	NGO
Maryati, T	F	Extension Division, Agriculture Agency	Ministry of Public Works and Housing	Demak, Indonesia	Recipient government
Massuque, S.	М	Programme Officer	Japan International Cooperation Agency (JICA)	Maputo, Mozambique	Donor government
Maulana, B.	М		Witteveen & Bos	Indonesia	Private organisation
Mbatsana, T.	М	Civil and Transport Engineer	Cornelder (Beira Port)	Beira, Mozambique	Private organisation
Megaradjasa, M.	F	Member	Managing Organization for Banger Polder SIMA	Semarang, Indonesia	Recipient government
Mendiate, R.E.J.	М	Director for Studies and Strategic Analysis	Zambezi Valley Development Agency (ZVDA)	Maputo, Mozambique	Recipient government
Miskad, S.	F		Ministry of Maritime Affairs and Fisheries	Indonesia	Recipient government
Morad, T.	М	Water expert Netherlands Embassy, Egypt (ret.)	Embassy of the Kingdom of the Netherlands	Cairo, Egypt	Donor government

Name	Sex	Position	Organisation	Location	Type of organisation
Mounkoro, B.	М	Co-ordinator, Drylands Development Programme (DryDev) Mali	Sahel Eco	Bamako, Mali	NGO
Muhari, A.	М	Head, Coastal Disaster Mitigation Section	Ministry of Maritime Affairs and Fisheries	Indonesia	Recipient government
Muis, A.	М	Head of Sub Directorate Planning, Directorate Irrigation and Lowland	Ministry of Public Works and Housing	Indonesia	Recipient government
Munstege, H.	М	Technical Assistant, Permanent Technical Secretariat	National Small-Scale Irrigation Programme (PNIP)	Mali	Recipient government
Muylwijk, J.	F	Executive Director	Gender and Water Alliance	The Netherlands	NGO
Napitupulu, M.	М	Founding Chair	Indonesia Water Partnership	Indonesia	Network
Nhamucho, R.	F	Director	Administration for Water Supply and Sanitation Infrastructure (AIAS)	Maputo, Mozambique	Recipient government
Ningrum, I.	F	Head, Maintenance Section	Special Capital City District of Jakarta	Jakarta, Indonesia	Recipient government
Vishat, A.	М	Professor Emeritus	BRAC University	Dhaka, Bangladesh	Knowledge Institution
Nooteboom, S.	М	Secretary, International Working Group	Netherlands Commission for Environmental Assessment	The Hague, The Netherlands	Donor government
Nurhabni, F.	F	Head, Coastal Utilisation Section	Ministry of Maritime Affairs and Fisheries	Indonesia	Recipient governmen
Nuri	М		Bappeda	Semarang City, Indonesia	Recipient government
Dberhagemann, K.	F	Team Leader	Flood and Riverbank Erosion Risk Management Investment Program (FRERMIP)	Dhaka, Bangladesh	Recipient government
Dude Lenferink, K.	М	Policy Officer Open Data and Water, Inclusive Green Growth Department	MFA-NL	The Hague, The Netherlands	Donor government

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Name	Sex	Position	Organisation	Location	Type of organisation
Pannekoek, G.	М	NWP, TA to Plataforma Moçambicana de Água (PLAMA)	Netherlands Water Partnership (NWP)	Maputo, Mozambique	Network
Panudju, T.I.	М	Director	Irrigation and Agriculture, Ministry of Agriculture	Indonesia	Recipient government
Pasha, C.Y.	М	Head, Sub-Directorate infrastructure and Transport	Bappeda	Grobogan, Indonesia	Recipient government
Peppen, D. van	М	Programme coordinator Partners voor Water	Netherlands Enterprise Agency (RVO)	The Hague, The Netherlands	Donor government
Piët, M.	М		Royal HaskoningDHV	Jakarta, Indonesia	Private organisation
Pineda, V.	F	Community Mobilisation Expert	Blue Gold Project	Dhaka, Bangladesh	Recipient government
Pompe, M. van der	М	Head of Development Co-operation/Deputy Head of Mission	Embassy of the Kingdom of the Netherlands	Maputo, Mozambique	Donor government
Prasetyo, B.Y.	М	Head	Water Resources and Spatial Planning Agency	Central Java Province, Indonesia	Recipient government
Puji S, P.	М	Member	Managing Organization for Banger Polder SIMA	Semarang, Indonesia	Recipient government
Purnamaningtyas, N.N.	F	Deputy Director for Bilateral Co-operation, Bureau of International Co-operation	Ministry of Environment and Forestry	Jakarta, Indonesia	Recipient government
Putra, H.	М		Ministry of Public Works and Housing	Jakarta, Indonesia	Recipient government
Putuhena, W.M.	М	Head of Research Centre for Water Resources Research and Development Agency	Ministry of Public Works and Housing	Indonesia	Recipient government

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Name	Sex	Position	Organisation	Location	Type of organisation
Quassem, M.A.	Μ	Chair, National Disaster Management Advisory Committee and Member	National Water Resources Council	Dhaka, Bangladesh	Recipient government
Quincieu, E.	М	Water Resources Specialist	ADB	Indonesia	Multilateral organisation
Rahman, H.	М	Deputy Chief Extension Officer	Bangladesh Water Development Board	Jessore, Bangladesh	Recipient government
Rahman, M.	М	Superintending Engineer (P&D), IWRM Unit	Local Government Engineering Department	Bangladesh	Recipient government
Rahman, M.A.	м	Senior Quality Control Engineer	Blue Gold	Khulna, Bangladesh	Recipient government
Rahman, M.M.	М	Project Director, IWM	UNDP	Dhaka, Bangladesh	Multilateral organisation
Rahman, M.M.	М	Project Director, General Economics Division, Planning Commission	Bangladesh Delta Plan 2100	Dhaka, Bangladesh	Recipient government
Rahman, M.M.	М	Additional Director General (Planning)	Bangladesh Water Development Board	Dhaka, Bangladesh	Recipient government
Rahmanto	М	Head of Section 1, Directorate of Water and Irrigation	Ministry of Agriculture	Indonesia	Recipient government
Rais, R.	М	Former Team Leader, Sea Defence component	Aceh Nias Sea Defence Project	Indonesia	Private organisation
Ramos, I.	F		International Union for the Conservation of Nature (IUCN)/SUSTAIN Africa	Maputo, Mozambique	NGO
Rhebergen, W.	М	Project Manager	WE Consult	Maputo, Mozambique	Private organisation
Rini, N.R.	F	Communications and Public Relations	Bappenas – Ministry of National Development Planning	Indonesia	Recipient government
Riyanto, S.	М	Member	Managing Organization for Banger Polder SIMA	Semarang, Indonesia	Recipient government

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Name	Sex	Position	Organisation	Location	Type of organisation
Rizaldi, M.A.	м	Directorate River and Coastal	Ministry of Public Works and Housing	Indonesia	Recipient government
Robson, M.	м	FAO Representative	Food and Agriculture Organization (FAO)	Dhaka, Bangladesh	Multilateral organisation
Rodrigues, N.	М	Technical Director	Zambezi Valley Development Agency (ZVDA)	Maputo, Mozambique	Recipient government
Roelofs, K.	F	Head of Water Cluster Department Inclusive Green Growth	MFA-NL	The Hague, The Netherlands	Donor government
Roy, I.B.	М	Programme Co-ordinator	Sustainable Agriculture, Food Security and Linkages (SAFAL) – Solidaridad	Khulna, Bangladesh	NGO
Roy, S.	М	Assistant Programme Co-ordinator	Sustainable Agriculture, Food Security and Linkages (SAFAL) – Solidaridad	Khulna, Bangladesh	NGO
Rudyanto, A.	М	Head of Sub Directorate Coastal, Directorate River and Coastal	Ministry of Public Works and Housing	Indonesia	Recipient government
Saifodine, F.	F	Policy Officer for Water and Sanitation	Embassy of the Kingdom of the Netherlands	Maputo, Mozambique	Donor government
Saleh, A.F.M.	М	Professor, Institute of Water and Flood Management	Bangladesh University of Engineering and Technology	Dhaka, Bangladesh	Knowledge Institution
Saleh, I.	М	Chief, Sub Directorate, Rivers, Lakes and Reservoirs	Bappenas – Ministry of National Development Planning	Indonesia	Recipient government
Santoso, I.	Μ	Director General of Water Resources	Ministry of Public Works and Housing	Indonesia	Recipient government
Saranga, S.	F	Adviser	Ministry of Public Works, Housing and Water Resources	Maputo, Mozambique	Recipient government
Sarifah	F		Ministry of Maritime Affairs and Fisheries	Jakarta, Indonesia	Recipient government
Satiar, M.Z.	F	Senior Adviser, Sexual and Reproductive Health and Rights	Embassy of the Kingdom of the Netherlands	Dhaka, Bangladesh	Donor government

Table VI.1 List of interviewees					
Name	Sex	Position	Organisation	Location	Type of organisation
Satria A, B.	М	Research	Bappeda	Demak District, Indonesia	Recipient government
Schaik, M. van	F	Senior Policy Adviser Water, Department Inclusive Green Growth	MFA-NL	The Hague, The Netherlands	Donor government
Schuur, S.	М	Head, Economic Department	Embassy of the Kingdom of the Netherlands	Jakarta, Indonesia	Donor government
Schwidder, L.S.	F	Project Officer (International)	Netherlands Water Partnership (NWP)	The Hague, The Netherlands	Network
Sechene, E.	М	Programme Officer/Agribusiness and Private Sector Development	Embassy of the Kingdom of the Netherlands	Maputo, Mozambique	Donor government
Seijger, C.	Μ	Post doc student at Urbanising Deltas of the World Research Project 'Strategic Delta Planning Processes in Bangladesh, NL, Vietnam and beyond'	Netherlands Organisation for Scientific Research (NWO)	The Hague, The Netherlands	Knowledge Institution
Setiawan, H.	М	Head of Sub Directorate Co-operation, Directorate. Water Resources Development	Ministry of Public Works and Housing	Indonesia	Recipient government
Shahid, S.	F	Team Leader	Gender and Water Alliance	Dhaka, Bangladesh	NGO
Shamsuddoha, M.D.	М	Project Co-ordinating Director, Char Development and Settlement Project (CDSP IV)	Bangladesh Water Development Board	Dhaka, Bangladesh	Recipient government
Sharmin, N.	F	Environment Specialist, Global Practice Social, Urban, Rural and Resilience	World Bank	Dhaka, Bangladesh	Multilateral organisation
Simango, D.	М	Mayor of Beira	Municipality Beira	Beira, Mozambique	Recipient government

Table VI.1 List of inte	Table VI.1 List of interviewees					
Name	Sex	Position	Organisation	Location	Type of organisation	
Siry, H.Y.	Μ	Deputy Director for Coastal Disaster Mitigation and Climate Change Adaptation	Ministry of Maritime Affairs and Fisheries	Indonesia	Recipient government	
Sitoe, S.	М	Head, Department of International Rivers	National Directorate of Water Resource Management (DNGRH)	Maputo, Mozambique	Recipient government	
Slotema, M.	Μ	Sustainable Water Fund (FDW). Former Policy Adviser Water at the Embassy of the Kingdom of the Netherlands Dhaka, Bangladesh	Netherlands Enterprise Agency (RVO)	Dhaka, Bangladesh	Donor government	
Sobhan, M.I.	Μ	Environment Specialist, Environment and Natural Resources Global Practice	World Bank	Dhaka, Bangladesh	Multilateral organisation	
Sofaniadi, S.	Μ		Bappeda	Semarang City, Indonesia	Recipient government	
Sri Ratna, G.	F	Head of Bilateral Co-operation, International Cooperation Division	Ministry of Public Works and Housing	Indonesia	Recipient government	
Steenbergen, F. van	Μ	Director	MetaMeta	's Hertogenbosch, The Netherlands	Private organisation	
Sterk, B.	М	Manager	Blue Gold Innovation Fund	The Netherlands	Recipient government	
Storada, N.	М	Head (Information Centre)	Semarang Merchant Marine Polytechnic (PIP)	City of Semarang, Indonesia	Knowledge Institution	
Subiyono	Μ	Head	Public Works (PU) and Housing Agency	Grobogan District, Indonesia	Recipient government	
Sucahyo, A.H.P.	М		Ministry of Public Works and Housing	Indonesia	Recipient government	
Sugiyanto	М	Head of O&M	Raw Water Section	Grobogan District, Indonesia	Recipient government	

Table VI.1 List of int	terviewe	es			
Name	Sex	Position	Organisation	Location	Type of organisation
Suharto	М		Marine Agency	Demak District, Indonesia	Recipient government
Sumadilaga, D.H.	М	Director General of Research and Development Strategy	Ministry of Public Works and Housing	Indonesia	Recipient government
Sumardi, D.	М	America – European Section, Bureau of International Co-operation	Ministry of Environment and Forestry	Indonesia	Recipient government
Sumarmi	F	Head of Section 2, Directorate of Irrigation and Agriculture	Ministry of Agriculture	Indonesia	Recipient government
Suprapto, A.	М	Director of Water Resources Management	Ministry of Public Works and Housing	Indonesia	Recipient government
Suprayogi, H.	М	Director of River and Coastal	Ministry of Public Works and Housing	Indonesia	Recipient government
Surya, P.	М		Ministry of Maritime Affairs and Fisheries	Indonesia	Recipient government
Susanto Astra, A.	М	Co-ordinator, Building with Nature	Wetlands International	Indonesia	NGO
Swartbol, R.	М	Ambassador	Embassy of the Kingdom of the Netherlands	Jakarta, Indonesia	Donor government
T'jonck, K.	М	Consultant	Mott MacDonald	The Netherlands	Private organisation
Tanjung, F.H.	М		Special Capital City District of Jakarta	Jakarta, Indonesia	Recipient government
Tesa	F		Smart City, Special Capital City District of Jakarta	Jakarta, Indonesia	Recipient government
Thiadens, A. E.	F	Financial Adviser	Embassy of the Kingdom of the Netherlands	Dhaka, Bangladesh	Donor government
Thissen, W.	М	Head, Policy Analysis Section	Delft University of Technology	Delft, The Netherlands	Knowledge Institution
Thoha, A.M.	М	Rector	Sultan Agung Islamic University	Semarang, Indonesia	Knowledge Institution
Tholen, P.	М	Head, Development Co-operation	Embassy of the Kingdom of the Netherlands	Bamako, Mali	Donor government

Table VI.1 List of in	nterviewe	es			
Name	Sex	Position	Organisation	Location	Type of organisation
Traore, A.N.	М	Head of Capacity building and Learning	WaterAid	Mali	NGO
Traore, D.	М	Head of Food Security and Climate Change Adaptation Programmes	CARE International	Mali	NGO
Tri Hananto, A.	м	Secretary	Regional City of Semarang	Semarang, Indonesia	Recipient government
Uddin, A.K.M.M.	м	Additional Director General	Bangladesh Water Development Board	Dhaka, Bangladesh	Recipient government
Uddin, M.J.	М	Project Director, Barind Multipurpose Development Project	Local Government Engineering Department	Dhaka , Bangladesh	Recipient government
Ullah, M.E.	М	Executive Engineer, Planning-1	Bangladesh Water Development Board	Dhaka, Bangladesh	Recipient government
Umans, L.	М	First Secretary, Food Security	Embassy of the Kingdom of the Netherlands	Dhaka, Bangladesh	Donor government
Umar, H.	М	Head	Desa Timbul Sloko	Desa Timbul Sloko, Indonesia	Recipient government
Verlinde, J.	М		Municipality of Rotterdam	Rotterdam, The Netherlands	Donor government
Vernimmen, R.	м		Deltares	Indonesia	Knowledge Institution
Vicente, C.	м	Director	Ara-Zambeze	Tete, Mozambique	Recipient government
Victor	М		Ministry of Public Works and Housing	Semarang City, Indonesia	Recipient government
Vries, P. de	М	First Secretary and Water Resources Expert	Embassy of the Kingdom of the Netherlands	Dhaka, Bangladesh	Donor government
Vries, T. de	М	Project Manager, Urban Dredging Demonstration Project	Vitens Evides International (VEI)	Dhaka, Bangladesh	Private organisation
Vroege, P.	М	Project Manager	Royal HaskoningDHV	Jakarta, Indonesia	Private organisation
Wahed, M.S.	М	Director, Administration, Finance, Accounts and Logistics	Centre for Environmental and Geographic Information Services,	Dhaka, Bangladesh	Knowledge Institution

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Name	Sex	Position	Organisation	Location	Type of organisation
Wahyu	F	Staff	Managing Organization for Banger Polder SIMA	Semarang, Indonesia	Recipient government
Wahyu, T.D.	М	Head of Division Irrigation	Ministry of Public Works and Housing	Grobogan District, Indonesia	Recipient government
Wahyudi, I.	М	Member	Managing Organization for Banger Polder SIMA	Semarang, Indonesia	Recipient government
Waji Ullah, M.	М	Executive Director	Centre for Environmental and Geographic Information Services	Dhaka, Bangladesh	Knowledge Institution
Wal, J.W.K. van der	М	Team Leader Char Development and Settlement Project (CDSP IV)	Mott Macdonald	The Netherlands	Private organisation
Warmerdam, S.	Μ	Policy Adviser Water EKN Jakarta, Former Program Manager Partners voor Water, Netherlands Enterprise Agency (RVO), Delegated Representative Water, Indonesia	Netherlands Enterprise Agency (RVO)/ Embassy of the Kingdom of the Netherlands	Jakarta, Indonesia	Donor government
Watering, M. van de	М		Royal HaskoningDHV	Jakarta, Indonesia	Private organisation
Wella, M.	F		Ministry of Maritime Affairs and Fisheries	Indonesia	Recipient government
Weningtyas	F		Blue Forest	Indonesia	NGO
Widianto, T.	М	Director of Water Resources Development	Ministry of Public Works and Housing	Indonesia	Recipient government
Widiarto	М	Director, Bureau of Budget Planning and International Co-operation	Ministry of Public Works and Housing	Indonesia	Recipient government
Widyanto, A.	М	Head of Section 1, Sub Directorate Regulation, Directorate Water Resources Management	Ministry of Public Works and Housing	Indonesia	Recipient government

Table VI.1 List of interviewees					
Name	Sex	Position	Organisation	Location	Type of organisation
Wieriks, K.	Μ	Special Advisor International Water Management	Ministry of Infrastructure and Environment	The Hague, The Netherlands	Donor government
Wilde, K. de	М		Consultant	The Netherlands	Private organisation
Wilms, T.	М	Coastal Engineer	Witteveen & Bos	Jakarta, Indonesia	Private organisation
Wirustyastuko, D.	Μ	Head, Policy Analysis, Water Resources Conservation Subdivision	Ministry for Economic Affairs	Jakarta, Indonesia	Recipient government
Wishart, M.	М	Water Specialist	World Bank	Jakarta, Indonesia	Multilateral organisation
Yap, J.T.L.	М	Network Manager	CK-Net (Cap-Net)	Indonesia	Multilateral organisation
Yuliati, N.	F	Head of Section technical guidance for Eastern Region	Ministry of Public Works and Housing	Indonesia	Recipient government
Yunianto, E.	М	Head of River, Dam and Coastal Division	Water Resources and Spatial Planning Agency	Central Java Province, Indonesia	Recipient government
Yuswardhanu	Μ	Head of O&M Section	Balai River Basin Operator under Regional Government (BPSDA)	Seluna, Indonesia	Recipient government
Zacarias, R.	F	Climate Change and WASH Adviser	Department for International Development (DfID)	Mozambique	Donor government
Zainal Fatah, M.	Μ	Assistant to Deputy, Water Resources Infrastructure	Ministry for Economic Affairs	Jakarta, Indonesia	Recipient government
Zanten, O. van	Μ	Water Systems Adviser	Waterschap De Dommel	Boxtel, The Netherlands	Donor government
Zee, T. van der	F	Deputy Head, Economic Department	Embassy of the Kingdom of the Netherlands	Jakarta, Indonesia	Donor government
Zijthoff, R. ten	м	Controller	Embassy of the Kingdom of the Netherlands	Dhaka, Bangladesh	Donor government

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