Policy evaluation of water management for development policy

Dutch Ministry of Foreign Affairs

Terms of Reference (25-01-2016)

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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 Water for Development policy, next to drinking water supply and sanitation. The policy evaluation will cover a 10 year period, from 2006 to 2015. From 2006 improved water management became a prominent part of the policy. The total budget for water related activities for this period is 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 2014).

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 was 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 onward the focus of the water management for 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 foreign investments' 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 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 Department for Inclusive Green Growth (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 centers, 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 Dutch water sector partners in implementing the policy; and with the Netherlands Enterprise Agency (RVO) responsible for management of policy 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. EVOLVING POLICY

Water related activities have for a long time been an important part of the development cooperation policy of the Netherlands. After an initial strong focus on technical solutions and an infrastructure-oriented policy, the notion of "water security" became visible at the turn of the Millennium. As a follow-up to the second World Water Forum in 2000, the paper 'Achieving Water Security' laid down the principles of the MFA water sector policy (MFA, 2001). The paper related water security to the management of water resources to protect against the vulnerabilities of livelihoods of poor people and the integrity of ecosystems.

At the launch of the Millennium Development Goals in 2000, the access to improved water sources and basic sanitation target however triggered a stronger focus on drinking water supply and sanitation. In the explanatory memorandum (EM) to the budget for 2006, in addition to water supply and sanitation, improved water management was taken up as an explicit policy objective. The EM underlines that it is particularly the poor that not only lack access to (safe) water for drinking water but also for agriculture and productive services and who suffer most from droughts and floods. River basins are to be the point of departure for improved water management. Watershed areas are often trans-boundary; cross-border cooperation and integration are to play an important role in conflict prevention. This translated into the following ambition for water management:

- in eight partner countries the execution of plans for integrated water management has been intensified:
- in six trans-boundary watershed areas, of which four in Africa, a substantial impulse to improved water management has been provided.

These objectives were consistently mentioned until 2009 and reappeared, partly, in 2012, although with slight changes in their formulation and the countries/regions they relate to.¹

As from 2009 the policy of the MFA became increasingly linked to Dutch climate change and trade policy. Chapter 6 of the Dutch National Water Plan 2009-2015, that deals with the plan's international dimension, stipulates the ambition to contribute to climate change adaptation and the Millennium Development Goals and benefit from economic opportunities (Ministry of Transport, Public Works and Water Management, 2009). Dutch trade and industry policy prioritises the water sector as one of the top economic sectors (Ministry of Economic Affairs, Agriculture and Innovation, 2011). In line with the government's water policy the Dutch water sector presented its vision for the future in the document 'Water 2020, World leaders in Water' (Netherlands Water Partnership, 2011).

To implement chapter 6 of the National Water Plan the interdepartmental program *Water Mondiaal* was set up. In this interdepartmental program (2009-2015) the MFA, the MI&E and other ministries work together to establish sustainable relations of the Dutch water sector² and relevant parties in selected developing countries. The program *Water Mondiaal* is part of a broader program, Partners for Water (PvW) that is expected to increase the use of Dutch water sector know-how and expertise, engagement and exposure abroad while addressing water challenges. *Water Mondiaal* is implemented by the Netherlands Water Partnership (NWP)³ and RVO. It is funded from the budget of the MI&E (HGIS non-ODA funds, with an average budget of EUR 10 million annually for the period 2010-2015). The program aims to be instrumental to the Water for Development policy by bringing the Dutch sector to the attention of embassies for partner countries, providing technical services and facilitating networking and (coordinated) use of a wide

¹ Which countries and watershed areas were included changed from year to year. Annex 2 lists the relevant countries and watershed areas mentioned in the EMs to the MFA budget from year to year.

² Dutch water sector comprising government, private sector, civil society and knowledge organisations.

³ The Netherlands Water Partnership (NWP), established in 1998, is a network organisation that aims at greater impact abroad of the Dutch water sector. The NWP started as implementing agent for the program Partners for Water that works with country platforms and coordinators to advise Embassies and help built alliances and consortia of Dutch water sector actors for particular bidding contracts.

range of available water sector and other grants and subsidies for public-private partnerships (PPPs), infrastructure, feasibility studies and pilots. Most of these are managed by RVO. Annex 5 shows a list of available instruments. The EM to the MFA 2011 budget mentions among its result areas that five delta countries (Bangladesh, Egypt, Indonesia, Mozambique and Vietnam)⁴ are supported by the Dutch interdepartmental program *Water Mondiaal*.

Relevant to policy implementation has been the 2011 MFA letter to the parliament presenting in addition to the spearheads of development cooperation, the choice and classification of partner countries. The letter distinguishes between profile 1 countries where aid plays an important role, profile 2 fragile states where an integrated approach to peace, security and development forms the core of the program and profile 3 countries with healthy economic growth where all spearheads will feature, with decreasing ODA budget. In addition to these countries for a number of partner middle income countries a transition facility was announced enabling transition to a mutually profitable economic partnership. Water management policy implementation takes place across the distinguished categories of countries.

The 2012 policy letter 'Water for Development' gives priority to efficient water use, particularly in agriculture, in addition to policies for watershed management and safe deltas (the further use of the term water management in this ToR refers to these themes). Sustainability is to be pursued by the scrutiny of programs on environmental effects and by additional measures to prevent and reduce damage to ecosystems⁵. The policy was reported to set out a two pronged approach, on the one hand interventions towards institutional development, on the other hand investments in required infrastructure for improved water management (direct implementation) (Parliament, questions and answers, 2012, 13). Strengthening of the sector and sector policy based support is to be pursued but more than in the recent past, implementation will be by projects. For the financing of infrastructure special attention is to be paid to lower income groups, although both richer and poorer are expected to benefit. The policy themes food security and adaptation to climate change are to be integrated and good governance and gender are cross cutting themes.^{6 7} In the design and implementation of water management programs and projects special attention is to be paid to the participation of women in decision making in water user groups (Parliament, questions and answers, 2012, 15). Visible results and synergy between activities is to be pursued.

The policy letter confirms the role assigned to the Dutch water sector as driving force for pursuing and achieving objectives (MFA, 2012, p.12). The approach to engaging the Dutch water sector is to be demand driven. Demand for water related services of Dutch companies is expected to come from multilateral development banks and UN agencies, international donors and national governments. Dutch parties are expected to be effective 'sparring partners' in translating experiences to particular contexts (Parliament, questions and answers, 2012, 6).

The MFA's 2012 policy letter sets out the following ambitions for the period to 2015: For efficient water use, particularly in relation to agriculture:

• In Dutch supported programs water productivity- and the relation between the quantity of water used and agricultural production- improved by at least 25 %;

⁴ The selection of the countries by the Netherlands Water Partnership was reported to be based on countries that have deltas with similar challenges as in The Netherlands. In 2014 Myanmar and in 2015 Columbia were added as a *Water Mondiaal* country.

⁵ This will be done through the input of experts, the Commission on Environmental Assessment, the Climate and Development Exchange Network and the World Resources Institute (Parliament, questions and answers, 2012, 15).

⁶ Good governance relates to structures, functions and processes put in place towards achieving objectives, in particular with respect to stakeholder participation, water development regulation, compliance, decisive water management, financing and cost recovery, (international) arbitration and conflict resolution transparency in decision making and accountability.

⁷ The policy letter stipulates that in the field of international arbitration and conflict resolution the Netherlands has the necessary expertise that could be used. It is mentioned that with the Clingendael institute, the Water Governance Centre and The Hague Institute for Global Justice possibilities for water diplomacy are studied.

For improved watershed management and safe delta's

- In at least eight watershed areas and delta's (Bangladesh, Benin, Ghana, Indonesia, Kenya, Mali, Mozambique and Vietnam) support is provided to the development of plans for sustainable growth and water security and implementation of these plans has started;
- In at least seven⁸ cross border watershed areas, groundwater systems and deltas (Brahmaputra, Incomati, Mekong, Senegal, West Bank Aquifer and Zambezi) a contribution is made to cross border negotiation and joint watershed management (MFA, 2012, 7-9).

The latter two policy objectives are in line with the objectives initially mentioned in 2006 and consequently mentioned until 2009. But with respect to the development and implementation of water management plans, the main focus has shifted from national water plans to sub-national and trans-boundary watershed areas such as river basins, groundwater systems and deltas.

Together the three policy objectives summarised in box 1 are the core of the Dutch water management for development policy between 2006 and 2015. They are therefore the main focus of attention in this study.

Box 1 water management policy objectives

- Water productivity: improved water management for increased productivity in agriculture
- Developing and implementing water management plans at national or sub-national level

The 2013 development policy note 'A World to Gain: a new agenda for aid, trade and foreign investments' confirms water for development to be a policy priority as well as prerequisite for food security and energy.

The following policy letters sent to the Dutch parliament in 2014 and 2015 give further input for water management related adjustment and/or refinement of policies, notably:

- the MFA Food Security policy letter 2014 introduces concepts of climate smart area based approach and investments in land use planning, land development, adaptation to climate change, eco-efficient production and area based management, including river basin management aiming to arrive at resilient systems;
- the MFA climate financing policy letter 2015 identifies water related infrastructure as an important domain for climate change adaptation;
- the policy letter of the MFA, MI&E and the Ministry of Economic Affairs (MEA) of 2015 on the International Water Ambition emphasises the Dutch focus on resiliency in urban deltas and their surrounding sourcing areas for food, water supply etc.

At the international level the UN 2030 Agenda for Sustainable Development Goals (SDGs) and targets provides a reference for MFA policy. The UN have taken up sustainable management of water among its SDGs, targeting including water-use efficiency across sectors and ensuring sustainable supply and withdrawals of fresh water and reduction of the number of people suffering from water scarcity, integrated water resource management at all levels and protection of water related eco-systems.

⁸ Although only six specific areas are mentioned in the policy letter it is explicitly stated that 7 areas will be supported.

EXPENDITURES

Total ODA expenditures in the period 2006-2015 amounted to EUR 1.595⁹ million of which EUR 700¹⁰ million, or 44% was for water management and the remaining EUR 895 million, or 56%, was for drinking water supply and sanitation activities. Figure 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 1 ODA expenditures on water management and drinking water and sanitation for the period 2006-2015

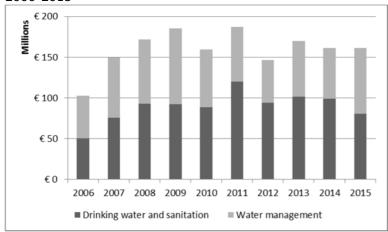
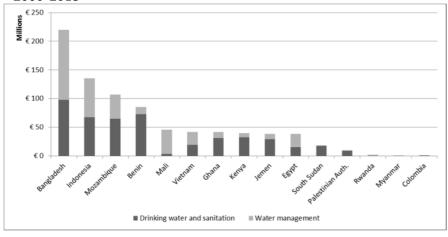


Figure 2 shows total delegated expenditures for the period for partner countries with a water program and for countries that are supported in the framework of *Water Mondiaal*. In these countries 52% (EUR 823 million) of total water related expenditures were made. The figure seems to indicate that countries 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 2 ODA expenditures on water management and drinking water and sanitation for the period 2006-2015



⁹ This amount was retrieved from the MFA's activity management information system based on SBE's (sub policy lines) and CRS purpose codes (OESO-DAC) reported to be related to water, these are listed in annex 3. ¹⁰ The distinction between water management and drinking water and sanitation is made based on SBE's and CRS purpose codes, which is shown in annex 3.

65% (EUR1.041 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 in annex 5 and an unknown number of countries via supported multilateral¹¹, other PPPs and NGO water management related activities.

155 ODA-funded activities, 125 within and 30 outside the policy article, with a budget over EUR 1 million and ongoing or completed after 2007, were identified for which financial information has been analyzed. Annex 3 explains the procedure followed for identification of these activities. Total expenditures on the 155 activities amount to EUR 697 million ¹². The 155 activities are divided ¹³ into the three policy objectives and a category 'other', which comprises activities that could not directly be related to one of the policy objectives ¹⁴.

Figure 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 transboundary 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.

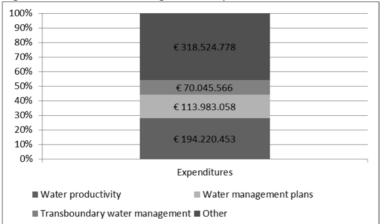


Figure 3 ODA water management expenditures of 155 activities specified per policy objective

Activities in this category more generally aim at capacity building or knowledge creation in the water sector or in the domain of climate change adaptation¹⁵. 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.

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¹¹ Annex 8 provides a list of activities executed by multilateral organisations

¹² Annex 4 shows expenditures and number of activities per country for each policy objective.

¹³ To which policy objective an activity is related is not always straightforward because appraisal memoranda are not always clear on this. Therefore, figure 3 may be considered approximation. However, a majority of the activities have been verified by embassies to make sure they are assigned to the right policy objective.
¹⁴ It should be noted that only 125 of the selected 155 activities are funded from the SBE's for the policy article 6.2 as listed in annex 3. Of the remaining 30 activities funded from other SBE's, 16 are included in the category other. These still have been incorporated to obtain broad insight in support provided to water management. Annex 6 provides an overview of these 30 activities from other SBE's.

¹⁵ A list of activities in the category other is presented in annex 7.

Therefore, the final amount spent on the major policy objectives is likely to be higher than 54% of total expenditures.

4. THEORY OF CHANGE

This chapter presents the MFA's policy Theory of Change (ToC) for improved water management for partner countries and by policy objective. The ToC addresses the question how the policy is expected to work and deliver expected policy outcomes. It defines the linkages between inputs, activities, outputs and outcomes and identifies critical assumptions that can be tested about the conditions under which outcomes will be achieved. The ToCs provide a key reference for the assessment of policy performance. The ToCs are expected to be reflected, at least in part, in the ToC for specific activities.

4.1 THEORY OF CHANGE

The following figure pictures the MFA's policy Theory of Change for improved water management for development in partner countries. The policy broadly covers the policy, including the policy change as from 2009 linking the policy to the Dutch trade and climate change policy and the addition of the water productivity in agriculture objective in 2012.

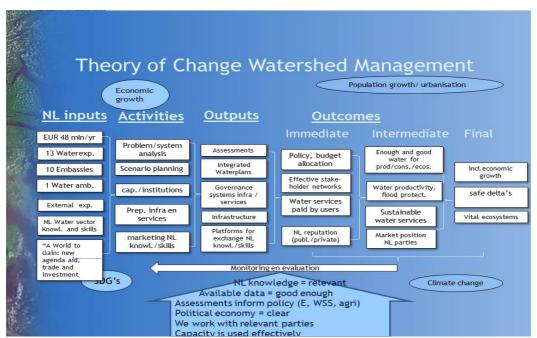


Figure 3 Theory of Change, source: DGIS 2015

The amount of EUR 48 mln/yr refers to the approximate yearly budget delegated to Embassies for partner countries for support to water management. The 13 experts are thematic experts working for the MFA's policy department and concerned embassies. The position of water ambassador (special envoy for international water affairs) has been created by the MI&E to reinforce Dutch ambitions in the water domain and contribute to boosting the international market position of Dutch know-how and expertise. External experts provide various technical advisory services; among others through the interdepartmental program Partners for Water.

Not fully captured in the above figure are cross cutting policy themes and principles mentioned in chapter 2.2, in particular:

- Inclusive development:
 - o Poverty focus: special attention for lower income groups;

- o Gender focus: women's participation in decision making and benefits;
- Recipient countries' and/or other development partners' demand driven engagement;
- Visible results and synergy between activities¹⁶.

4.2 WATER PRODUCTIVITY

Within the broad policy framework the three main policy objectives each have their own intervention logic and underlying assumptions as to how expected policy outcomes will be achieved. This was not worked out initially, but for the sake of this study has been reconstructed based on available documentation¹⁷.

The intervention logic for water productivity is shown in figure 4, followed by a list of assumptions. The main strategy is support to a water user group, association or federation¹⁸ (WUA), which is a participative organisation that is expected to take up the interests of water users in its command area and be accountable to them. WUAs are either created or strengthened by improving the enabling institutional environment for its functioning and the skills of its (board) members. It also includes introducing mechanisms for accountability between different levels of water user organisations and government institutions.

Well-functioning WUAs are expected to have several effects on water productivity. WUAs are expected to improve operation and maintenance (O&M) of water infrastructure and to fund O&M from fees collected from farmers. When infrastructure is lacking or needs repair, funding for construction and/or rehabilitation is usually provided though a (partly) donor funded development project after which ownership and/or management is transferred to the WUA. WUAs receive capacity building to ensure the infrastructure is used and maintained appropriately. Infrastructure construction and rehabilitation is expected to increase water productivity even without support to WUAs and ownership transfer, at least in the short term.

A strengthened WUA can have an effect on decision making regarding water policies, such as on water pricing, as well, through collaboration with (strengthened) government institutions and other relevant actors. This should contribute to more efficient and equitable distribution of water. Also, policies for water reuse may be developed to improve water use efficiency.

Also, WUAs may be better positioned to disseminate knowledge and skills to its members, given that access to information and technologies is provided through technical assistance and the input of (among others) the Dutch water sector. Access to technologies and information is expected to enable the farmer to invest in his/her farm, especially water saving techniques and technologies. Together, policies aimed at improved water use efficiency, better maintained and operated water infrastructure and increased skills and investments of farmers should lead to increases in production and a relative decrease in water use.

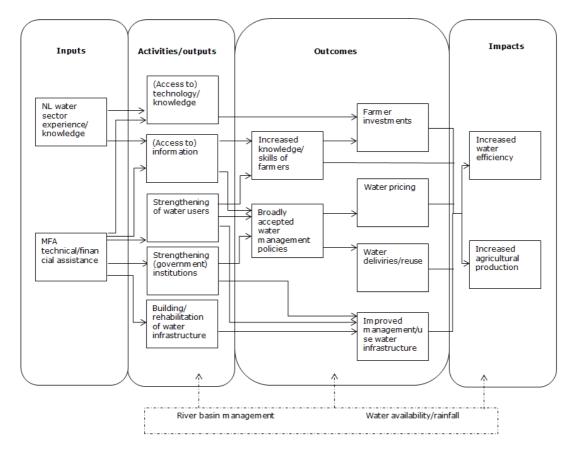
Figure 4 Intervention logic of support to water productivity

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¹⁶ Source: letter to the Parliament 'Water for Development ', 2012 and 'A world to gain: a new agenda for aid trade and investment', 2013.

¹⁷ These are the EM to the annual budgets and the Water for Development policy letter to parliament (2012). Also, in 2015 the policy department IGG provided a more elaborate explanation of the way the policy objectives are expected to be achieved, which was used to design the different intervention logics.
¹⁸ Water user groups/associations (WUA) are usually a group of farmers organised at the lowest level, for

example a village or (part of) an irrigation scheme. Water user federations exist of several WUA's taking responsibility for a larger part/area of the water infrastructure, usually a primary or secondary irrigation canal. Sometimes three layers of water user organisations exist.



Assumptions underlying this reconstructed intervention logic are:

- Current water management is not optimal for agricultural production, i.e. a constraint.
- Technical assistance is able to create functioning WUAs by improving their (water) management knowledge and skills and promoting accountabilities in water management.
- WUAs are functioning sufficiently to manage water infrastructure and provide O&M in a participatory way.
- Dutch water sector provides knowledge and technologies that are relevant and practical for farmers to use.
- Farmers are able to use available information and technologies to increase their (water) productivity through investments or use of better techniques.
- Strengthening of WUAs and government institutions enables them to engage in meaningful dialogue and arrive at broadly accepted water management policies that increase water productivity.
- Improved O&M leads to a sustainable increase in the quality of water infrastructure which, together with improved management of this infrastructure, results in reduced water salinity/pollution, waterlogging/improved drainage, improved timing of water deliveries and/or the creation of water buffers.
- Improvements in water management result in the availability of water of sufficient quantity and quality at the right time and an improved relation between quantity of water used and agricultural production.
- Farmers contribute to WUAs in cash and kind, enough to sustain the WUAs financially.
- Individual farmers are able to use their new knowledge and skills to improve their on-farm water management, resulting in improved water availability and an improved relation between quantity of water used and agricultural production.

4.3 WATER MANAGEMENT PLAN

The reconstructed intervention logic is shown in figure 5. The water management plans are either at a national or sub-national level: a delta, river basin or other defined watershed area. The plans are (co-) financed by the MFA and drafted by a third-party, in collaboration with the government of the receiving country. After finishing and approval of the plan it should be implemented. The specific contents of the plan may vary as specific water related challenges vary and as the plan is to be the result of a participative process involving the government and other stakeholders. Some general water management principles are expected to be taken up, such as principles of integrated water resource management (IWRM). This concept is taken up in policy MFA documents and is among the SDG targets. The concept has evolved over time. The MFA supported Global Water Partnership defines IWRM as 'a process which 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' 19.

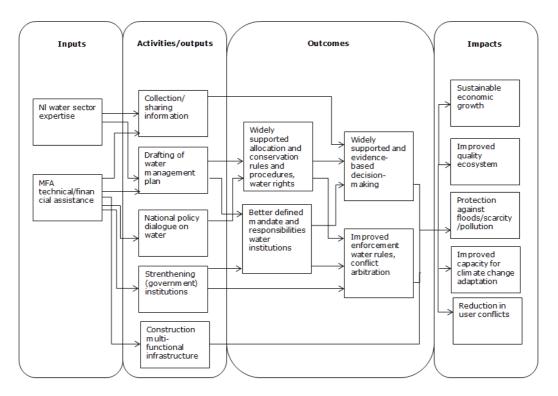
Whether a water management plan fully adheres to the IWRM concept or not, it should at least be the result of an inclusive and transparent process to ensure the plan reflects the needs of relevant stakeholders and is therefore broadly accepted. Plans are likely to include the following elements. Implementation of the plan should improve the institutional setting for sustainable water management, with clearly defined roles and responsibilities combined with an increase in capacity. This should lead to an improvement in water allocation and conservation rules and procedures and the allocation of water rights. Also, the capacity to enforce and arbitrate on these rules is expected to be improved. With the plans drafted and institutions strengthened decision making should be well-informed, equitable and infrastructure should be in place or put in place to be able to implement decisions. Together, this should lead to improved protection from water related problems, less water user conflicts, improved ecosystem quality and capacity to include and implement climate change adaptation and inclusive socio-economic development measures.

Key external factors taken up in the figure below that influence results are rainfall and river basin management, influencing water availability for agricultural production.

Figure 5 Intervention logic of support to water management plans

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¹⁹ Source: www.gwp.org.



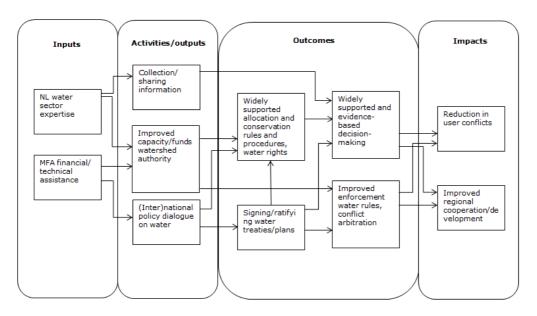
Assumptions underlying this reconstructed intervention logic are:

- A water management plan is drafted which is supported by all relevant parties and of sufficient quality.
- The inclusive nature of the process of preparing a plan and the plan itself ensures that decisions made and measures taken are widely supported by relevant stakeholders.
- Information is gathered and shared and is sufficient to ensure decision-making is well informed.
- The drafted plan is translated into policy and budgets have been made available for implementation.
- Activities have been undertaken, possibly as part of the plan, to improve the capacity of water institutions, improve water policies and measures and clarify their mandate and responsibilities.
- Water infrastructure is built which enables implementation of water management related decisions.
- Improved institutional capacity, accepted water policies and measures and water infrastructure and O&M services lead to sustained protection from water related problems, improved quality of the ecosystem, capacity for climate change adaptation, reduction in user conflicts and contributions to inclusive socio-economic development.

4.4 TRANSBOUNDARY WATER MANAGEMENT

The reconstructed intervention logic is shown in figure 6. Trans-boundary watershed authorities are the main focus of support to improve trans-boundary water management. By improving the capacity, both financially and technically, of these organisations they are expected to be able to improve water use allocation, regulation and its enforcement. This process is 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 trans-boundary water management. 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.

Figure 6 Intervention logic of support to trans-boundary water management



Decision making is expected to take place based on clear agreements between countries and informed by information gathered and shared about the basin. The information is expected to be instrumental to acceptance of trans-boundary arrangements and agreements by the riparian countries.

Improved decision making, as expressed in rules for allocation and regulation and the enforcement of these rules, should lead to a reduction in user conflicts and an increase in regional cooperation and development.

Assumptions underlying this reconstructed intervention logic are:

- Through financial and technical assistance, diplomacy and (inter) national policy dialogue in which all relevant parties are sufficiently represented, the intervention is able to enhance agreement on sharing of available water, allocation and conservation rules and support for collective trans-boundary management, which leads to the signing of treaties/plans.
- Information gathered and shared is relevant and is used in decision making.
- The MFA supported intervention contributes to the creation or strengthening of a transboundary water management authority.
- An improved functioning water management authority is able to improve trans-boundary water management, i.e. water is regulated and allocated in a fair and acceptable way and rules are enforced.
- Improved allocation and regulation of water leads to a reduction in user conflicts between states and individuals and improved regional cooperation and development.

5. EVALUATION SCOPE, CRITERIA AND QUESTIONS

5.1 EVALUATION SCOPE AND CRITERIA

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 centers, 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 EUR1 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 program 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.

Effectiveness is defined as the achievement of expected Water Management for Development policy outcomes. Over time the overall policy ToC remained largely the same, except for the role assigned to the Dutch water sector as from 2009 and the addition of the water productivity objective in 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, vital ecosystems 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 intended 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. Different sustainability risk dimensions are distinguished: technical, financial, institutional, environmental, political, economic and sociocultural.

Efficiency refers to how optimally resources are converted into benefits, meaning minimizing costs of resources and/or maximizing 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. The criterion further refers to the contribution of the Dutch water sector to information, knowledge and technologies that is relevant and practical for intended beneficiaries to use. 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, arrangements and agreements, taking into account quality of results.

For the learning purpose the policy evaluation will capture reported experience based 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; public private partnerships for water management; 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.

5.2 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. In what way was the policy implemented (government institutional setting, nature and interconnection of instruments, changes in orientation and instruments and why)?
- 3. Did the policy to engage the Dutch water sector manifest itself in new policy mechanisms?
- 4. 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?
- 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?

Water management plans

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

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 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?

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 platforms for exchange of NL knowledge and skills been established; has the reputation and market position of the Dutch private sector (turn over, profit) improved; and did these results contribute at the same time to achievement of policy objectives (final outcome level)?

Efficiency

- 19. Was the MFA able to fulfill 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 was planned, with reference to information (systems), water management plans, arrangements and agreements, taking into account quality of results.

Policy options²⁰

- 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 2014. 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 3.a, 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.

METHODOLOGY

The evaluation questions listed in chapter 5 will steer systematic data collection from different sources. The methodology for each set of questions is explained in the sections below.

Annex 1 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 program and project level the respective results frameworks will serve as point of reference to specify indicators.

²⁰ An attempt to answering these questions will be made based on the findings of the policy evaluation by the responsible policy department(s) in collaboration with IOB.

Overall 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 delegated programs for the three countries that received most funding, Bangladesh, Indonesia and Mozambique and for a selection of major activities supported, further interviews of stakeholders and quantitative 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, analyze evidence carefully and base findings on information that is validated from multiple sources.

6.1 POLICY CYCLE

The descriptive questions will be addressed through review of available documents, of project management information and supplementary interviews, as shown in the evaluation matrix. Available evaluations of activities will be collected. Annex 10 provides a list of planned evaluations. Among the evaluations that are or are expected to be available and particularly useful is the planned evaluation the MFA Fund for Sustainable Water and the evaluation of the MI&E program Partners for Water. Document review and interviews of MFA water experts and other stakeholders will inform the approach to monitoring and evaluation and experience based policy lessons and issues.

6.2 EFFECTIVENESS

The policy ToC for partner countries and by distinguished objective will serve as point of reference for the study of policy effectiveness. Reported development results of the identified activities will be studied and a selection of 12 major activities will be subject to more in-depth study of effectiveness, including field study.

For each of the three policy objectives at least 3 activities will be taken up for in-depth study. For 2 studies on water productivity quantitative impact evaluation methods will be applied to study if interventions work as per the activity ToC and by how much and specify the Dutch contribution. For the other studies qualitative methods will be applied to study the achievement of development outcomes and test the assumed logic and assumptions; to specify the specific Dutch/ MFA contribution and examining other influencing factors.

For the activity studies that comprise field study case the methodology is explained in section 6.2.2.

Criteria for the selection of activities for in-depth study out of the 155 identified water management activities identified are explained below.

6.2.1 SELECTION CRITERIA FOR INCLUSION IN SAMPLE FOR IN-DEPTH STUDY²¹

In order to identify activities for inclusion in the sample for in-depth study the 155 activities were screened on their policy marker and outcome indicators. Based on this the following criteria for the selection of the activities for in-depth studies were identified:

The activity should relate to one of the three policy objectives.

²¹ Activities selected for in-depth study are listed in annex 9 including their objectives and strategy and the justification for inclusion in the sample.

- The activity should be of sufficient size financially in order to cover a relatively large part of the total activities portfolio and justify the costs of research into it.
- The Netherlands should be the main or a major donor.

The activities chosen for further study have a combined budget of EUR 176 million with expenditures in the period 2006-2015 of EUR 106 million, which is around 15% of the total budget of EUR 700 million.

6.2.2 METHODOLOGY FOR IN-DEPTH STUDY OF ACTIVITIES

Each study at activity level will start with an elaboration of the activity's ToC. The ToC addresses the question how the activity is expected to work and deliver results. It defines the linkages between inputs, activities/mechanisms/processes, outputs and outcomes and identifies critical assumptions that can be tested about the conditions under which outcomes will be achieved. These will be made explicit during the design of the study of specific activity.

The ToCs by activity are expected to include elements of the policy ToC and reconstructed intervention logic by objective but also to vary due to differences in the context in which the intervention takes place.

After establishing the theory of change, each study will employ a specific methodology to study policy effects, test the identified assumptions and answer the evaluation questions on effectiveness (and efficiency ref. section 6.3).

6.2.2.1 WATER PRODUCTIVITY

Water productivity interventions are designed to improve water availability and the relation between the quantity used and agricultural production through improved water management at the village level (WUA) and/or farm level. Interventions often include two elements: infrastructure construction and/or rehabilitation and improved O&M. Infrastructure construction and rehabilitation and O&M may be induced and/or supported by WUAs and other stakeholders (including the government). Decisions about O&M are based on WUA decisions.

Water management decisions at the level of the WUA affect the whole area (village), of which the effects should eventually become visible at the farm level. Interventions aimed at individual farmers directly influence the skills and means of production of farmers. The analysis will be at the level of the WUA and the individual farmers. The (changes in) functioning of the WUA are the intermediate outcome²² and (changes in) productivity and production are final outcomes. Presence and characteristics (e.g. participation, finances, skill) of the WUA will be linked to, firstly, the state and improvements in infrastructure, and secondly, the relation between quantity of water used and agricultural production. In this way it will be possible to assess the effect of the intervention on the functioning of WUAs and water management and, subsequently, the effects on the availability of water and the relation between quantity of water used and agricultural production.

Information on WUAs (inputs/interventions, composition, institutional environment/contextual information, activities/functions, functioning) will be gathered at that level. An assessment of the functioning of WUAs will be based on project documentation and interviews of a wide range of stakeholders and evidence of services provided and results (water availability and relation quantity used and agricultural production). Information on water productivity will be collected through surveys at the level of WUAs and households (farmers).

²² WUA functioning will be measured using indicators identified in the literature on the subject. This will be further explained in the impact studies.

For this part two impact studies are currently ongoing and two additional activities will be studied based on available documentation and supplementary interviews.

Bangladesh: Blue Gold

Blue Gold is a bilateral activity in Bangladesh that runs from 2012 to 2020 with a budget of EUR 60 million of which EUR 50 million is financed by the Netherlands. Its objective is to reduce poverty for 1 million persons in an area of 160,000 ha by improving agricultural production and business development. Also, by creating polders and improving the embankments an improvement in protection against floods and storms should be achieved.

The strategy is to form water user organisations that should perform O&M of improved water infrastructure and perform other services for its members such as value chain improvement and credit services.

The impact study of Blue Gold has already started, being linked to a related IOB impact study on food security. This impact evaluation combines a household survey with a survey among water user organisations. The household survey includes approximately 800 households in four polders (including 2 control groups). The additional WUA survey aims at getting information from 40 water user groups in the same four polders. Both surveys include a baseline and posttest measurement.

The size of the baseline and final household surveys will be based on power calculations and includes a control group and an intervention group. Endogeneity will be tackled by using a fixed effects approach (or difference in difference approach). The WUAs surveys include variables that measure the functioning of WUAs and the quality of water management. Through linking the databases it may be possible to assess the impact of the functioning of water user groups and of water management on productivity and production, controlling for other variables (caused by timevariant unobservables).

Indonesia: Participative Sector Irrigation Project (PSIP)

PSIP is an Asian Development Bank (ADB) project in Indonesia that run from 2004 until 2014 with a total budget of \$ 126 million of which \$ 15.2 million is contributed by the MFA. The MFA contribution is especially aimed at capacity building. The objective is to increase agricultural yields through sustainable, decentralised management of irrigation infrastructure. This is attempted by the creation/strengthening of 6250 water user groups and federations and the training of 36250 farmers to improve their irrigation management skills. Then, irrigation infrastructure is rehabilitated and ownership transferred to water user groups. Also, at district level the formulation of directives and policies with respect to water management and of irrigation management plans is supported.

Cooperation with the ADB has been pursued for a joint impact evaluation. The impact evaluation method applies propensity score matching (PSM) where participants and non-participants will be matched based on certain characteristics before the start of the intervention to be able to observe whether changes occurred in variables of interest.

Egypt: Integrated Irrigation Improvement and Management Project

IIIMP is a World Bank (WB) project in Egypt that was implemented from 2005 until 2016 with a budget of \$ 303 million of which \$ 25 million is paid by the MFA. The main objective is to establish sustainable, decentralised, participative irrigation infrastructure management through the creation of 3000 WUAs. Infrastructure is rehabilitated and its ownership is transferred to the water user associations. Institutional capacity is improved at local, district, regional and national water authority level. The MFA contribution is mainly focused on the 'software' side of the project, i.e. capacity building of WUAs, local and regional government.

The evaluation will be based on evaluations of the World Bank. Final reports on the activities and outputs of the project are available, including a report specifically on the outputs of the capacity building activities of the project. An impact evaluation is expected to be available in the near

future that should include data on indicators of water productivity, partially based on remote sensing techniques. These evaluations will be supplemented by interviews with relevant stakeholders.

Regional Program in the Sahel and Horn of Africa

Regional Program in the Sahel and Horn of Africa is a WB project that is entirely financed by the MFA through the WB CGIAR fund with a budget of EUR 40 million. It lasts from 2013 until 2018 and is active in five countries: Ethiopia, Kenya, Mali, Niger and Burkina Faso. Its objectives are to improve water management and food security, commercialise the rural economy and create an enabling political and institutional environment.

The strategy is to 'upscale' proven techniques that lead to more water productivity at farm/village and watershed level. Improved water management at the farm/village level should be achieved through construction of small water retention infrastructure and improved water management skills of farmers. At watershed level this is done through drafting and implementation of water management plans. Finally, commercialisation of the rural economy is attempted through improved access to value chains and credit and an enabling institutional and political environment is created through adaptations to existing legislature and organizing farmer groups to influence policy making.

A baseline report will become available this year and a mid-term evaluation in 2016. Based on these two reports supported by progress reports and interviews, the development and progress of water management related parts of the project will be studied.

6.2.2.2 WATER MANAGEMENT PLANS

A constraint in evaluating water management plans is the factor time. The development of water management plans and their implementation tend to be long-term processes. Many stakeholders are involved in the formulation and implementation may be particularly challenging because of the need to generate political support and funds and lack of capacity at the implementing level. As a result, impact on the ground is likely not to have materialised for recent water management plans. For these reasons, the evaluation will mainly focus on the process of the formulation of water management plans, the relevance and role of the Netherlands in this context, the quality of the plans and the likelihood of implementation and achievement of policy goals.

In line with this approach, the evaluation will include in-depth study of two activities, focusing on:

- hvdrological situation
- political context/ stakeholder networks (conducive environment)
- quality of the plans
- whether assessments and/or plans have informed policies
- institutional capacity to sustainably implement policies and plans
- budget allocations for implementation
- (likelihood of) implementation and achievement of expected development outcomes

The analysis will be qualitative. Steered by the evaluation questions on effectiveness the analysis includes:

- elaboration of the theory of change (logical consistency, plausibility and acceptance);
- assessment of the development of water management plans;
- assessment of the budget allocation and implementation of these plans;
- assessment of the role of the Netherlands and of (potential) influencing factors;
- reported policy lessons and issues pertaining to the working of interventions and alternative theories.

The analysis will be based on the study of relevant project documents, including the plan itself, and interviews with key stakeholders.

The first stage addresses the question why support was provided, focusing on the hydrological situation, the political and institutional context, the institutional capacity and available resources. Next, attention will be paid to the process of formulating the plan and the role GoN played in

influencing it. Policy principles such as stakeholder participation and respect of other IWRM principles will receive specific interest. Medema et al. (2008) discern three requirements for successful implementation of water management plans:

- an enabling legislative and policy environment;
- an appropriate institutional framework composed of a mixture of central-local and publicprivate organisations that provides the governance arrangements for administering; and
- a set of management instruments for gathering data and information, assessing resource levels and needs, and allocating resources for use.

The evaluation will assess to what extent these and other conditions were fulfilled at the start of or during the process and the role of the Netherlands in realising them.

The third stage focuses on the *quality* of the water management plans, budget allocation and (likelihood of) implementation and achievement of goals. A generally accepted list of performance indicators does not exist (Medema et al. 2008; Wolff et al. 2012). Therefore, the quality, as well as the (likelihood of) implementation and achievement of objectives, will be assessed with the support of an independent international expert in water management. The assessment will also capture the likelihood that changes in the institutional environment are likely to be sustained in the (near) future when, and if, implemented.

Finally, the studies will analyse the actual budget allocations and implementation of water management plans. For plans that have been implemented available evaluations will be used as source of information on development results. If not available, an assessment of actual results will be derived from monitoring reports, interviews and focus group discussions.

The policy evaluation envisages in-depth study of the following two activities.

Bangladesh: Delta Plan 2100

This plan for 2013-2017 with a budget of EUR 8.8 million, aims to create an integrated water management strategy for the whole country to last until the year 2100 based on proper scientific evidence in consultation with all relevant stakeholders. The objectives are to support an enabling social-political climate for the BDP 2100 drafting and implementation process, to create a common and inclusive and documented knowledge base on water, land and related natural resources and spatial planning in Bangladesh delta, to develop a Delta Framework encompassing all necessary and agreed upon reforms of the current institutional framework, to create together with main stakeholders a delta vision, to facilitate entrepreneurship of the private sector and to promote regional and sectorial developments in the short term for future improvements of governance of water, land and related resources and spatial planning in the Bangladesh delta.

Jakarta: Coastal Development Program master planning

The Jakarta Coastal Development Program: master planning phase 2012-2014, with a budget of EUR 3,500,000, is contracted to RVO and implemented by a consortium of companies and institutions. Flooding has always been a regular problem in Jakarta. However, the common perception until recently was that Jakarta was only threatened by rain/river induced flooding. In 2008 the bilateral Jakarta Flood Management project, through its Flood Hazard Mapping component, was able to show that Jakarta is more and more threatened by floods from the sea due to a combination of land subsidence and rising sea levels. The Ministry of National Development Planning (Bappenas) subsequently formulated a project document for the development of a strategic plan that was to provide a number of options for the future coastal defence of Jakarta. In 2009 Bappenas requested the Netherlands government to contribute to the development of such a strategy for North Java. The Jakarta Coastal Defence Strategy (JCDS) study was subsequently implemented under the umbrella of the 4 Party MoU on bilateral cooperation on water management. The JCDS was to be followed by a master planning phase which would enable the government of Indonesia and all concerned stakeholders to start the realisation of the Coastal Defence Strategy by 2014. The activity concerns the master planning phase proper of the JCDS. The first component concerns Technical Assistance for the Program Management Unit (PMU) of the JCDS program. This PMU will not only direct and guide the implementation of the program but will

ultimately also operate and maintain the Jakarta Coastal Defense System realised under the JCDS. The TA-component was to be operational during the establishment phase of the PMU (2012-2014). The second component will focus on defining the integrated solution for the coastal defense system of Greater Jakarta as such. The third component consists of annual review missions, an independent End of Project evaluation mission and an allocation for special studies not covered by the two main components (e.g. coastal morphology, modeling soil subsidence)

The main outcome of the Master planning component will be that an integrated solution for the Jakarta Coastal Defence has been defined which is synchronised with the overall Flood Management objectives for Jakarta and with the overall urban development planning for the city. At least part of the solutions will have been defined in such detail that actual implementation (by GoI) can start by 2014.

Egypt: National Water Resources Plan coordination

NWRP coordination in Egypt (2007-2011), with a budget of EUR 5.4 million aims to create the right institutional environment for the implementation of the National Water Resources Plan 2017 (also financed by the MFA in an earlier stage). The intervention was expected to succeed in implementing an operational planning and decision making structure at the central and lower government levels through which the government's 5 year plans could be drafted based on the governorates' (regional government) integrated water plans. This was to be done through the creation of capacity in government institutions and by ensuring communication and cooperation between different layers of government and other stakeholders and by supporting the planning and decision-making capacities of several water management authorities at different levels. Also, these measures were to be recognised by all stakeholders and supported by the National Water Council. Finally, monitoring and evaluation capacity was to be created.

Six African countries: Global Water Partnership nation IWRM plans

In addition the policy evaluation will use existing evaluation reports, such as the evaluation of GWP nation IWRM plans for six African countries which lasted from 2004 until 2007. GWP nation IWRM plans, with a budget of EUR 6.4 million, created national water management plans for six African countries (Mozambique, Eritrea, Swaziland, Cape Verde, Benin and Cameroon). The strategy was to ensure stakeholder participation in planning processes of the different relevant ministries which should result in an IWRM plan with clear goals and budget. This was ensured through the creation and strengthening of multi-stakeholder partnerships at different levels.

6.2.2.3 TRANS-BOUNDARY WATER MANAGEMENT

Trans-boundary water management involves several riparian countries of a watershed, usually a river basin. Collective management can be achieved through the establishment/strengthening of a river basin authority or through agreements/treaties regarding (inter)national action with respect to water management in the watershed. This makes trans-boundary water management more complex than national water management. Water management regimes differ more between countries than within countries (Timmerman et al. 2011) and countries are often reluctant to delegate powers to a relatively autonomously functioning water authority. Possible actions of such an authority may be difficult to control and may have an adverse effect on a riparian country, especially considering the vital importance of freshwater sources for agriculture.

Trans-boundary water management is usually a highly political undertaking (Wirkus and Böge, 2006) and conflicts of interest between countries located upstream and downstream complicate the process. It requires coordination over different political, legal and institutional settings. Economic inequity and power asymmetry are important barriers to cooperation, though long-term and flexible support from third parties may encourage effective cooperation (Jägerskog et al. 2009). In Southern Africa for instance, TWM has been reported to be fairly effective because of the leading economic and political role of South Africa in the process, pursuing a pro-integration policy. In this interplay of forces, donors can only play a very modest role (Mostert, 2005).

While several studies have stressed the need to monitor trans-boundary water management programmes and to evaluate the effectiveness and sustainability of donor engagement (Mostert, 2005), it appears that TWM programmes are hardly evaluated, if at all. There has been a lot of research in this area (see for instance Scheumann and Neubert, 2006), but these studies lack an explanation of the applied methodology. Zeitoun and Warner (2006) propose a framework for analysis, but this framework focuses on trans-boundary water conflicts. Mostert (2006) stresses the importance of analysing the hydrological, socio-economic, institutional, political and cultural context.

The evaluation approach is mostly the same as for water management plans, but has to take into account the more politicised nature. Evaluation of TBWM must take into account the differences in political and economic interests between countries, internal politics and interests of groups within the countries. An additional factor in trans-boundary water management is the asymmetry in interests and powers between upstream and downstream countries. Upstream countries have less incentive to participate in negotiations because they control, to a certain extent, the flow of water through its territory and have less to gain from negotiations that may include agreements over water use. Downstream countries, on the contrary, have much more to gain from negotiations over water allocation given that they are dependent on upstream countries for their water needs. (van der Zaaq, 2007)

Several possible criteria exist for the sharing of water between riparian countries. (Van der Zaag, Seyam and Savenije, 2002). However, these criteria require consensus on difficult issues such as a countries 'water rights', a minimum amount each country is entitled to, and water sharing based on a countries' rainfall, population, area or a combination of them. Also, whether 'green' (water in the soil) water should be included in the calculations next to 'blue' (renewable water in rivers and aquifers) water should be agreed upon. Given these difficulties, donors may be able to keep the process going by building trust and supporting joint activities between the riparian countries.

The support may consist of:

- exchange of expertise and capacity building;
- provision of funds;
- financial support for specific activities;
- direct intervention: convening, facilitation, mediation, etc.

Based on more extensive research by the German Development Institute (DIE), Scheumann and Neubert (2006) give seven recommendations for development cooperation on trans-boundary water management. According to the authors, donors should:

- 1. create incentives for cooperation and support benefit-sharing arrangements;
- 2. strengthen information exchange and management;
- 3. support the establishment of coordination and cooperation forums;
- 4. promote the sustainable funding of river- and lake-basin organisations;
- 5. strengthen public participation in trans-boundary water management;
- 6. strengthen donor coordination;
- 7. extend cooperation to cover groundwater management.

However, the role of donors may sometimes increase the complexity of already difficult and sensitive negotiations. Also, dependence on foreign donors for support to trans-boundary institutions may be problematic. In some cases the role of donors should be more limited such as support for trans-boundary studies or scientific networks.

The evaluation of TBWM will include one field based study and three studies of activities making use of available documentation and complementary on-line interviews, including two MFA supported multilateral activities. The field based study concerns the Programme for the Maputo and Incomati river basins. Further studies will be done on the MFA support to the Mekong River Flood Management and Mitigation Project and to the World Bank OMVS Trust fund for the Senegal River basin and the Nile Basin Initiative.

Cooperation Programme Maputo/Incomati

The Cooperation Programme, with a budget of EUR 3.5 million running from 2013 until 2017, is a follow-up to earlier GoN support to trans-boundary water management in the Maputo and Incomati river basins involving Mozambique, South Africa and Swaziland. It also complements sector-support to the Ministry of Water of Mozambique. The activity builds on the interim agreement between riparian countries on the collective management of the river basins, which was part of earlier support of the MFA. The Cooperation Programme provides support to the Tripartite Permanent Technical Committee to establish a river basin organisation for the Incomati and Maputo rivers. This should be achieved by amending the interim agreement to include arrangements on financial obligations of the countries.

Mekong River Commission

The Flood Management and Mitigation Project which ran from 2004 until 2010 with a budget EUR 11.5 million, aimed to prevent, minimise and mitigate damage as a result of flooding in the Mekong river basin in Vietnam, Cambodia and Laos. Support is granted through the Mekong River Commission (MRC). The objectives are to establish a Regional Flood Management and Mitigation Centre to store data and produce forecasts on the Mekong River, capacity building at local and trans-boundary level to ensure people are aware of the risk and mitigation measures and the riparian countries comply with flood management measures of the MRC. This is done through the creation and support of the centre and capacity building at several levels.

Senegal river basin: Organisation pour la Mise en Valuer du fleuve de Senegal (OMVS)

For the study of MFA (co) funded partly WB executed support to water management of the Senegal river basin, use will be made of available documentation. The OMVS trust fund 2 (2009-2012), with a budget of EUR 9.5 million, is a follow-up to earlier support to the OMVS. In another activity, studies were done to assess the topographical situation in certain parts of the Senegal river basin. The objective was to improve the river flow in 10 parts of the Senegal River basin in Senegal and Mauritania. The exact length of embankment to be rehabilitated was to be decided after the studies were completed. This was to be done through (partly) removing typha from parts of the river, after which the riverbed near the embankment was to be lowered to make sure the typha doesn't take root again. Some typha was to be left on the embankments to improve its resilience. Afterwards, local communities were to be trained and the necessary equipment supplied to remove this typha themselves. The OMVS is regarded as an example of a functioning transboundary watershed authority and therefore it could function as a benchmark for other such authorities.

Nile Basin Initiative

In the Nile basin support has been provided to the Nile Basin Initiative (NBI), which started in 1999, led by the World Bank. The NBI trust fund, to which the GoN contributed \$ 38 million, was initiated in 2001 to coordinate donor efforts in the Nile basin. The NBI tries to improve transboundary water management between the riparian countries of the Nile (Egypt, Sudan, Ethiopia, Uganda, Kenya, Tanzania, Burundi, Rwanda, the Democratic Republic of Congo (DRC) and Eritrea as an observer) through a dialogue that was to lead to a shared vision between the countries. The shared vision is to be a Basin-wide program that focuses on building institutions, sharing data and information, providing training and creating avenues for dialogue and region-wide networks needed for joint problem-solving, collaborative development, and developing multi-sector and multi-country programs of investment to develop water resources in a sustainable way.

6.3 EFFICIENCY

The documents reviewed to address the first set of descriptive questions will also be scrutinised for information on efficiency. The question on the fulfillment of the role of the MFA as expert, broker and diplomat, in enhancing collaboration between concerned actors within the Dutch Government, water sector and within partner countries, and on complementarity and synergy between activities

will be taken up as well in interviews of the range of stakeholders within the Dutch government, the Netherlands and in developing countries. Information on efficiency by policy objective will be captured from available documentation, supplemented by interviews of MFA water experts. Further information on efficiency will be gathered as part of the planned in-country study of the Bangladesh, Indonesia and Mozambique Embassy program and of activities selected for in-depth study of effectiveness. The study of efficiency will further benefit from the assessment of the quality of water management plans by an independent water management expert to be contracted for the policy evaluation, as explained in section 6.2.2.

7. STAKEHOLDERS

The identified primary stakeholders for this policy evaluation are:

- Dutch Ministry of Foreign Affairs, Inclusive Green Growth department;
- Dutch Ministry of Infrastructure and Environment;
- Netherlands embassies in partner countries;
- Netherlands Enterprise Agency, Netherlands Water Partnership;
- Concerned authorities, other donors, executing and implementing agencies in partner countries.
- Targeted final beneficiaries.

The MFA's policy department and water experts of embassies for partner countries will be asked to comment on the draft ToRs and reports for the policy evaluation. For the in-country study of selected country programs 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 design and draft reports.

8. ORGANISATION AND PLANNING

8.1 ORGANISATION

Responsible IOB manager and researcher: Rita Tesselaar

Researcher: Joep Schenk

Co readers: Ferko Bodnar and Antonie de Kemp

Chair Reference group: Geert Geut, Deputy Director IOB

Members Reference Group

- 1. Ms. Ebru Akdag, Dutch Ministry of Finance, Inspectie der Rijksfinanciën
- 2. Prof. Eelco van Beek, professor Modeling Integrated Water Resources Management, University of Twente
- 3. Mr. Aart van der Horst, MFA policy department Inclusive Green Growth
- 4. Mr. Maarten Gischler, MFA policy department Inclusive Green Growth

- 5. Ms. Willem Mak, program manager Water International, Ministry of Infrastructure and Environment, International Water Cluster
- 6. Mr. Dennis van Peppen, RVO, program coordinator Water Internationaal
- 7. Mr. Bert Vermaat, MFA Department of Finance and Economic Affairs
- 8. Prof. Linden Vincent, emeritus professor of Irrigation and Water Engeneering, Wageningen University
- 9. Prof. Pieter van der Zaag, professor of Water Resources Management, UNESCO-IHE, Delft

8.2 PLANNING

Table 2 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, MoF 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 country programs and activities' case studies Bangladesh, Indonesia and Mozambique Consultation of embassies and authorities Ongoing information gathering and analysis 	IOB
March 2016	Selection and contracting consultants for three qualitative field studies Determining quality proposals consultants Contracting consultants for studies	IOB
April 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:	Consultants, IOB
April - Dec. 2016	 Conducting of three field studies Bangladesh, Indonesia and Mozambique: Document review, interviews/FGD's range of stakeholders Report writing reports Study of further 5 selected activities for more in-depth study 	Consultants/IOB IOB
Jun 2016-Dec 2017	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	IOB
January-March 2017	 Writing final report Soliciting and addressing comments of peer reviewers, reference group, MFA water experts, other key stakeholders 	IOB

8.3 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 country program studies for Bangladesh, Indonesia and Mozambique, will be contracted to a consultant with a mix of thematic and evaluation expertise. IOB will join the planned 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 terms of reference for these studies will be detailed by the consultant in line with the ToR for the policy evaluation, in close consultation with and subject to approval of IOB.

9. WORKING DAYS AND BUDGET

Table 3 Estimated numbers of working days required period November 2015 - 2017

	IOB evaluator	IOB researcher	International Consultant	national consultant
Development of tools and information and data gathering	70	80		
Preparation of consultant's ToR; tendering and contracting of consultants	20	10		
Inception phase consultant and finalisation of ToR for country MASP and activity case studies	10	10	20	
Preparation and conduct of qualitative studies Bangladesh, Indonesia, Mozambique	30	30	90	60
Data collection, analysis and writing of report for three country study reports	30	20	60	30
Data analysis and extracting evidence for all evaluation questions and overall report writing	60	80		
Communication with peer reviewers, reference group, stakeholders including addressing comments on draft documents	30	20	10	
Total	250	250	180	90

Table 4 Estimated budget required *

Item	Budget (x EUR 1,000)
Quantitative impact studies	
International consultant	
Travel expenses	

Local consultant	
Travel expenses IOB researcher	
Reference group	
Subtotal	
VAT (21%)	
Miscellaneous (10%)	
Total budget	
*Note: the budget does not include travel expenses of the IOB evaluator	

ANNEX 1 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. What has been done to market Dutch knowledge/ skills and did involvement increase; did the policy to engage the Dutch water sector manifest itself in new policy mechanisms; what was done to ensure demand driven engagement?	Number and type of Dutch organisations; type and volume of contributions; proportion of Dutch ODA funded contracts; other funding sources; policy choices decision making and coordination mechanisms	Interviews including: IGG, MI&E, other ministries, RVO, Dutch water sector informants, embassies		
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	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		

	agents.	
Water productivity		
6. Did 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 MA 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.
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 management			
13. Did MFA support contribute to strengthened arrangements and formal agreements over transboundary 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	
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 platforms for exchange of NL knowledge and skills been established; has the reputation of the Dutch water sector and market position of the Dutch private sector improved; and did outputs of Dutch sector inputs at the same time contribute to achievement of policy objectives (final outcome level)?	Platforms of exchange composition and functioning; appreciation contribution Dutch water sector; change over time in turn over and/ or profit Dutch private sector; contribution of Dutch sector outputs to achievement of policy objectives?	evaluation reports, interviews embassies, Dutch water sector public and private sector and donor partners, in country authorities, implementing agencies	

Efficiency		
19. Was MFA able to fulfill 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
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 ANNUAL WATER MANAGEMENT POLICY OBJECTIVES

The policy objectives as mentioned in the explanatory memoranda to the annual budgets of the MFA are shown below for each year separately. The countries and watersheds mentioned annually are shown in the figure at the bottom.

2006:

- In eight partner countries is the execution of IWRM-plans intensified.
- In six trans-boundary watershed areas, of which four are located in Africa, a substantial push towards improved water management is given.

2007:

- In eight partner countries, including Egypt and Vietnam, the execution of IWRM-plans has intensified.
- In seven trans-boundary watershed areas, a substantial push towards improved water management is given. These are: Ganges, Maputo-Incomati, Mekong, Nile, Niger, Senegal and Zambezi (in Mozambique and Zambia).

2008:

- In eight water partner countries the IWRM plans, after completion, are included in national policies (PRSP's) and budgets and implementation has started.
- Improvement of trans-boundary water management through improved planning, de signing of treaties on water management and an improved regional cooperation in seven watershed areas. These are: Ganges, Maputo-Incomati, Mekong, Nile, Niger, Senegal and Zambezi.

2009:

- In six African countries IWRM plans, after completion, are included in policies and budgets.
- In six trans-boundary watershed areas water management has improved and contributes to improved regional cooperation. These are: Ganges, Maputo-Incomati, Nile, Niger, Senegal, Mekong and Zambezi.
- Two partner countries are supported in increasing their knowledge of, and adjust their policies in the water sector towards, climate change adaptation.

2010:

- Five partner countries, including Indonesia, are supported through *Water Mondiaal* to increase their knowledge of climate change adaptation in the water sector and improve the management of deltas in their countries.
- In the partner countries Mozambique and Uganda an analysis into corruption in the water sector is done and anti-corruption programs are in place.

2011:

- Five partner countries, Bangladesh, Egypt, Indonesia, Mozambique and Vietnam, are supported through *Water Mondiaal* to increase their knowledge of climate change adaptation in the water sector and improve the management of deltas in their countries.

2012:

- The bilateral programs will be designed according to the MASP's, stressing the link between agriculture, food security and ecosystem management. In five partner countries cooperation on water is intensified, where the objectives of *Water Mondiaal* are leading. These programs also include climate change adaptation.
- A PPP on water is started.
- Through multilateral activities via trust funds of the WB and ADB, improved transboundary watershed area management and capacity building is supported in the Nile, Mekong and Ganges basins.
- UNESCO-IHE is supported.

2013:

- Supporting programs that increase water productivity in partner countries.
- In a minimum of eight watershed areas, developing and executing plans for sustainable economic growth and water security through financial and technical assistance. These include: Bangladesh, Benin, Ghana, Indonesia, Kenya, Mali, Mozambique and Vietnam.

- In a minimum of seven large trans-boundary watershed areas, supporting negotiations and collective water management through financial and technical assistance. These are: Nile, Niger, Brahmaputra, Senegal and West Bank Aquifer.
- Through technical assistance, organizing of trainings and workshops a contribution is made to easing tensions over water management in five watershed areas.
- Improving water regulations in five countries: Benin, Kenya, Palestinian Authorities, Rwanda and South-Sudan.
- Starting several PPP's to improve relations within the water sector of the Netherlands and partner countries.
- Improving the cooperation between the government, knowledge institutes, NGO's and the private sector by involving the broad water sector in designing and executing bilateral and multilateral programs.

2014:

- Supporting programs aimed at increasing water productivity in partner countries, taking into account climate change.
- Providing financial and technical assistance to the development and implementation of plans for sustainable economic growth and water security in at least eight watershed areas. These include: Bangladesh, Benin, Ghana, Indonesia, Kenya, Mali, Mozambique and Vietnam.
- Providing financial and technical support to trans-boundary negotiations and joint watershed management in at least seven large watershed areas. These include: Brahmaputra, Incomati, Mekong, Senegal, West Bank Aquifer and Vietnam.
- Technical assistance to training and workshops to decrease tensions over water management in 5 watershed areas.
- Improving regulations about water management in five countries. These are: Benin, Kenya, Palestinian Authorities, Rwanda and South-Sudan.
- Supporting several PPP's to improve relations between the Dutch private water sector and partner countries.
- Improving cooperation between the government, knowledge institutes, NGO's and the private sector by including them in the design and implementation of activities.

2015:

- Within the priority themes water and food security an integral and sustainable approach will be the main criterion for the choice of activities to be supported. This means that climate change will be taken into account and a contribution will be made to access to renewable energy and a reduction in deforestation. Also, in close collaboration with the private sector, knowledge institutes and NGO's activities will be implemented which aim to make supply chains sustainable, increase water productivity in agriculture, ensure safe delta's and improve river basin management.
- As a result of increased urbanisation and demand for Dutch knowledge, the focus within the water theme will slowly change from rural to urban areas. However, in line with the preferences from parliament, 50% of the budget will continue to be allocated to rural areas. Also, 50% of the budget will be allocated to WASH-related activities.

This figure is a summary of the countries mentioned per policy objectives as specified in the annual budgets. A bar indicates a particular policy objective is not mentioned in that year. An x indicates a country is mentioned in a specific year as a recipient of support for that policy objective. A question mark indicates that only the number of countries receiving support for a policy objective is mentioned, not which specific countries are supported. Exceptions are water productivity in 2013 and 2014 where it is only stated that support will be provided without specifying in which countries or the number of countries supported. In 2015 no specific countries are mentioned that will be the focus of support.

Policy	Country/watershed	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
	?	-	-	-	-	-	-	?			
Water productivity	?	-	-	-	-	-	-	?		١ _	_
	?	-	-	-	-	-	-	?	?	?	3
productivity	?	-	-	-	-	-	-	?	•	•	-
	?	-	-	-	-	-	-	?			
	Egypt	?	х	?	?	-	-	-	-	-	
	Vietnam	?	х	?	?	-	-	-	Х	х	
	Bangladesh	?	?	?	?	-	-	-	Х	х	
	Benin	?	?	?	?	-	-	-	Х	х	_
WM-plans	Ghana	?	?	?	?	-	-	-	х	х	3
	Indonesia	?	?	?	?	-	-	-	х	х	•
	Kenya	?	?	?	-	-	-	-	х	х	
	Mali	?	?	?	-	-	-	-	х	х	
	Mozambique	-	-	-	-	-	-	-	Х	х	
	Ganges	?	Х	Х	Х	-	-	Х	-	-	
	Maputo-Incomati	?	х	Х	х	-	-	-	-	х	
	Mekong	?	х	Х	х	-	-	-	-	х	
	Nile	?	х	Х	х	-	-	х	Х	-	_
Transboundary	Niger	?	х	Х	х	-	-	х	Х	-	?
	Senegal	?	х	Х	х	-	-	-	Х	х	-
	Zambezi	-	х	х	х	-	-	-	-	х	
	Brahmaputra	-	-	-	-	-	-	-	х	х	
	West Bank Aquifer	-	-	-	-	-	-	-	Х	х	
	Indonesia	-	-	-	?	Х	Х	?	-	?	
	Mozambique	-	-	-	?	х	х	?	-	?	
	Uganda	-	-	-	-	х	-	?	-	?	
	Bangladesh	-	-	-	-	?	х	?	-	?	
Other	Vietnam	-	-	-	-	?	х	?	-	?	_
	Egypt	-	-	-	-	?	х	-	-	-	?
	Benin	-	-	-	-	?	-	-	х	х	•
	Kenya	-	-	-	-	-	-	-	х	х	
	Palenstinian Authorities	-	-	-	-	-	-	-	x	x	
	Rwanda	-	-	-	-	-	-	-	х	х	
	South-Sudan	-	-	-	-	-	-	-	Х	х	

ANNEX 3 EXPLANATION EXPENDITURES AND ACTIVITIES

Reporting on expenditures is based on actual annual expenditures per activity as retrieved from the MFA's activity information management system (Piramide) on December 22nd 2015. Activities have several characteristics of which the sub policy line (SBE), CRS purpose code (reporting to OESO-DAC) and policy marker are the most important. The MFA's program 'Dashboard' reports expenditures per policy 'spearhead', of which water is one. These expenditures are based on a selection of SBE's²³, CRS codes and policy characteristics as listed in table 1 below.

Table 1 Characteristics of activities used by Dashboard to report expenditures on water

SBE number	SBE definition		
0610s15	Water		
0610s18	Water decentraal: drinkwater en sanitatie		
0611s02	Milieu decentraal: integraal w aterbeheer		
0620s04	Thema: integraal w aterbeheer		
1040s04	Water centraal: drinkw ater en sanitatie		
1912s00	MFS/TMF: w ater		
CRS code	CRS code definition		
14010	Water sector policy and administrative management		
14015	Water resources conservation (including data collection		
14020	Water supply and sanitation - large systems		
14021	Water supply - large systems		
14022	Sanitation - large systems		
14030	Basic drinking water supply and basic sanitation		
14031	Basic drinking water supply		
14032	Basic sanitation		
14040	River basin development		
14050	Waste management/disposal		
14081	Education and training in water supply and sanitation		
31140	Agricultural w ater resources		
41050	Flood prevention/control		

Policy marker Policy characteristics definition

GntWat	Geintegreerd waterbeheer
Drw San	Drinkw ater en sanitatie

These characteristics were used to retrieve water activities and their budgets for the period $2006-2015^{24}$ from Piramide. The main focus is on expenditures from the water policy lines (expenditures of EUR 1,411,129,670) in addition to CRS codes (expenditures of EUR 183,509,079) related to water. Total expenditures in the period are therefore EUR 1,594,638,749.

 23 Starting from 2012 the annual budget mentions, under policy article 6, commitments on water (6.2) separately from those on environment (6.1). From 2006 to 2012 both policy objectives 6.1 and 6.2 contain water SBE's. SBE's that fall under policy objective 6.2 from 2012 onwards, also for the period 2006-2011, are used, which are listed in table 1. Closer inspection reveals that the SBE's themselves did not change in the period 2006-2015, nor were SBE's removed, which makes the current selection accurate in terms of actual ODA expenditures on water.

²⁴ Dashboard only reports starting from 2010, therefore this information was not sufficient.

Because the policy characteristics GntWat and DrwSan are used widely, they were not included because they related too many activities to water (for example SNV and UNICEF core funding because of their drinking water and sanitation components), which is clearly not an accurate representation of the waterpolicy.²⁵ The activities which were only included based on their water policy marker were scrutinised, however, to make sure no relevant activities were excluded; a further 10 activities with a budget of EUR 121 million were included, because of their relevance with respect to water management. These expenditures are additional to the EUR 1.6 billion identified earlier.

Distinction drinking water and sanitation and water management

Activities financed from the SBE's 0610s18 and 1040s04 are clearly related to drinking water and sanitation, while 0611s02 and 0620s04 are related to water management. However, as the identification included activities that corresponded to either an SBE or CRS code in the list, not necessarily both, activities could actually relate to other SBE's and CRS codes than listed above. For the list of CRS codes (after filtering the activities from the four SBE's mentioned) used to separate the remaining activities financed from other SBE's a decision had to be made whether they relate (more) to drinking water and sanitation or water management. This is listed in table 2.

By using this distinction, the amounts of EUR 700 million and EUR 895 million, for water management and drinking water and sanitation respectively, were retrieved.

Table 2 Remaining CRS codes and their assignment²⁶

CRS code	CRS code definition	Relates to:
14010	Water sector policy and administrative management	Water management
14015	Water resources conservation (including data collection)	Water management
14020	Water supply and sanitation - large systems	Drinking water & sanitation
14021	Water supply - large systems	Drinking water & sanitation
14030	Basic drinking water supply and basic sanitation	Drinking water & sanitation
14031	Basic drinking water supply	Drinking water & sanitation
14032	Basic sanitation	Drinking water & sanitation
14040	River basin development	Water management
14050	Waste management/disposal	Water management
14081	Education and training in water supply and sanitation	Drinking water & sanitation
25010	Business support services and institutions	Water management
31120	Agricultural development	Water management
31140	Agricultural water resources	Water management
31161	Food crop production	Water management
31165	Agricultural alternative development	Water management
33181	Trade education/training	Water management
41050	Flood prevention/control	Water management

-

²⁵ Dashboard, however, does include budgets of activities included only based on their policy marker in the reported expenditures on water. 100% of the expenditures if an activity has a water policy marker with the tag 'very important' and 40% with the tag 'important'. Including activities based on these criteria would add another EUR 861,412,669 to the expenditures of EUR 1.6 billion.

²⁵ The activities which were only included based on their water policy marker were scrutinised to make sure no relevant activities were excluded; a further 10 activities with a budget of EUR 121 million were included because of their relevance with respect to water management.

²⁶ Some CRS purpose codes do not clearly relate to either water management or drinking water and sanitation, for example 25010 and 33181. But their importance in terms of expenditures is limited so therefore their assignment to either of them does not influence the overall picture that emerges on expenditures.

Selection of activities

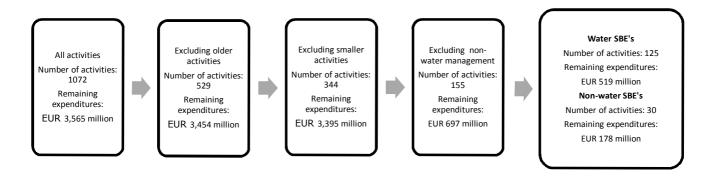
The selection of 155 activities was done as follows, also shown graphically in figure 1 below. A total list of 1072 water related activities was retrieved from Piramide on December 22nd 2015 based on the criteria specified in table 1, including the policy markers²⁷.

Activities with expenditures ending in 2006 or 2007 are expected to contribute more to policies dating from before the period of interest starting in 2006, therefore they have been excluded. Of the 1072 activities 679 had expenditures in the period 2006-2015. Of these 529 remained after filtering on expenditures ending in 2006 or 2007.

Of these, 344 activities were left after filtering on an activity budget below EUR1 million. These 344 activities were scrutinised on its contents based on appraisal documents and if necessary further documentation to establish whether it relates (more) to water management or drinking water and sanitation. 155 activities appeared to have a significant water management focus or component.

Of the 185 activities with a budget below EUR1 million, 59 were found to be relevant for water management with a total budget of EUR 19 million. Activities smaller than EUR1 million are not taken up in the further financial analysis in chapter 3 of the ToR because they compose only a small part of expenditures, overall and by policy objective.

Figure 1 Schematic representation of the activity selection process

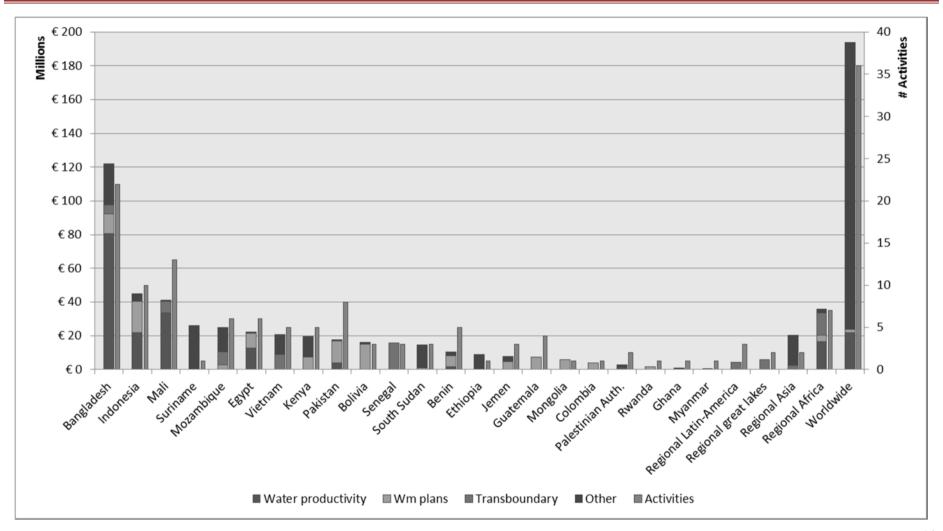


Of the EUR 1.6 billion of expenditures financed from the water policy lines (of which EUR 700 million relates to water management), EUR 519 million is included in this policy evaluation, of which a further EUR 176 million is covered through in-depth studies by IOB^{28} .

²⁷ These were included to make sure no relevant activities were excluded. As explained, this provided an additional 10 activities with expenditures of EUR 121 million; these are included in the final list of 155 activities.

²⁸ Of the activities in the sample for in-depth study, one (SN OMVS-Water/Environment) is financed from a non-water policy line and therefore not included in the EUR 176 mentioned.

ANNEX 4 EXPENDITURE AND ACTIVITIES PER COUNTRY AND POLICY OBJECTIVE



ANNEX 5 IMPLEMENTING PARTNERS & INSTRUMENTS

With respect to policy implementation a distinction is made between delegated and centrally funded activities and their respective implementing partners as shown in the table (excluding recipient governments).

To further engage and stimulate collaboration with the Dutch water sector in 2012 a Public-Private Partnership (PPP) fund of EUR 150 million 'Fund Sustainable Water' was established on which 44 countries can draw. The facility aims to make use of added value of NGO's, knowledge organisations and companies in collaboration with public parties. Activities are selected based on calls for proposals. The subsidised partners are expected to contribute funds of their own, expected to generate an additional EUR 100 million. The 'Fund Sustainable Water' (as well as other relevant programs such as ORET) is managed by the executing organisation RVO. Some of the 44 beneficiary countries of the 'Fund Sustainable Water' also receive water related funds from other programs, such as ORET, PUM, other PPPs and from FMO- and CBI- implemented programs.

The 'Top sector Water' is a broad combination of programs of which the international part is aimed at improving the exposure of the Dutch private water sector through trade missions and bilateral missions. Apart from FDW, these programs are not funded from water policy budgets and are therefore not included in the budgets shown in figures 1 and 2. FDW is evaluated separately.

Decentral budget			
Know ledge institutes/universities	Multilateral	NGO	Private
Addis Abeba University	ADB	African Conservation Centre	COWI A/S
BRAC	FAO	African Wildlife Foundation	DHV
Deltares	IFC/WB	Asocars	Euroconsult
IVMI	MRC	Asorech	Niras
Maastricht School of Management	UNDP/PNUD	Care	Vitens
UNESCO	WFP	Fundacion Defensores de la Naturaleza	Waste b.v.
Waternet		Fundacion Solar	
		IUCN	
		NEF	
		WWF	
Central budget			
Knowledge institutes/universities	Multilateral	NGO	Private
ATPS	ADB	Aqua for all	
GWP	FAO	GWA	
IVVMI	IDB	IUCN	
Middle East desalination research cente	r IFAD	NVR	
NWO	OMVS	Water integrity network	
VU	SADC	WWF	
WUR	WB		
	UNDP/PNUD		

The current Dutch government institutional context for the Water for Development policy has become more complex as a result of partly overlapping responsibilities between the Dutch MFA of Foreign Affairs and other ministries, in particular the Ministry of Infrastructure and Environment that supports the Partners for Water program. Policy implementation has partly been contracted out to the RVO, which is part of the Ministry of Economic Affairs. RVO is the executing agent for development cooperation programs as well as other water programs or components of programs in developing countries.

The table below provides an overview of instruments that were made available by the Dutch government for the international water sector.

UNESCO

Grants and subsidies for public-private partnership, infrastructure, feasibility and pilots

1	Facility for Sustainable Entrepreneurship and Food Security (FDOV)	The Facility for Sustainable Entrepreneurship and Food Security (part of the Public-Private Partnership facility) stimulates public/private partnerships within the sphere of food security and private sector development in developing countries.
2	The Sustainable Water Fund (FDW)	The Sustainable Water Fund (FDW) is a Public-Private Partnership facility which aims to finance projects in the area of water safety and water security. The projects should alleviate poverty, help sustainable economic growth and self-reliance.
3	Partners for Water (PvW)	The Partners for Water subsidy scheme financially supports pilot and demonstration projects and feasibility studies for innovative Dutch water technologies or methodologies contributing to solving water challenges in 26 countries in Eastern Europe, Afriica, South America and Asia.
4	Geodata for Agriculture and Water (G4AW) Facility	The G4AW Facility aims at improving the agricultural sector and fishing industry output by providing food producers with relevant information, advices or (financial) products through operational information chains using satellite data.
5	Subsidy scheme for Demonstration Projects, Feasibility Studies and Knowledge Acquisition (DFK)	The subsidy scheme for demonstration projects, feasibility studies and knowledge acquisition aims at supporting businesses that seize opportunities in emerging countries.
6	Facility for Infrastructure Development (ORIO/DRIVE)	The Facility for Infrastructure Development ORIO encourages public-infrastructure development in developing countries, contributing to the realisation of a functional public infrastructure that is relevant to human development and private-sector development. ORIO is now going through modernisation, the new name of the programme will be DRIVE: Developmentally Relevant Infrastructure Investment Vehicle.

Finance facility / revolving fund

Dutch Good Growth Fund (DGGF)	The DGGF is a fund with a revolving character intended for financing risky investments in and insurance of capital goods to 66 developing markets and developing countries. The aim of the DGGF is, enabling development-relevant trade and investments in developing markets and developing countries by granting financing and insurance. Investments and export must be acceptable to the general public and contribute to economic growth in the developing country concerned and in the Netherlands. The fund consists of three tracks: 1. Financing Netherlands SME 2. Financing SMEs developing countries and 3. Export guarantees. Track 1 will be implemented by RVO.nl and track 3 by Atradius. The fund manager for track 2 is not yet defined.

Interventions: International Cooperation, Missions and Matchmaking

1	PSD Apps	PSD-apps are tools which add to local capacity building and improvement of local legislation and feasibility of projects in partner countries. Dutch Representations may use these interventions as means to contribute to local development, to support investments of Dutch companies and to broaden their own local network.
2	Partners for Water (PvW)	This program supports the Dutch water sector internationally through the Netherlands Water Partnership in networking, communication, events, matchmaking, missions and international cooperation.
3	Water OS	The objective of this Water Development Cooperation (DC) assignment is: 'To assist Dutch embassies in the implementation of an ambitious water programme in the partner countries, in which we strive to involve the broad Dutch water sector on the basis of value added of Dutch knowledge and technology'.
4	Partners for International Business (PIB)	Supports consortia of at least three Dutch companies from the so-called top-sectors, aiming at entering foreign markets together. This is done through an integral approach, instead of through individual activities. The Dutch government acts as a partner and concentrates on tasks such as economic diplomacy, matchmaking, government to government cooperation (G2G) and technical assistance and/or knowledge transfer (K2K).
5	DRR-Team	the Dutch Risk Reduction Team is composed of top Dutch water experts. It consists of high level advisors supported by a broad base of technical experts who can provide top quality and tailor made expertise to governments that are confronted with severe and urgent water challenges. These experts will be sent in on request by foreign governments.

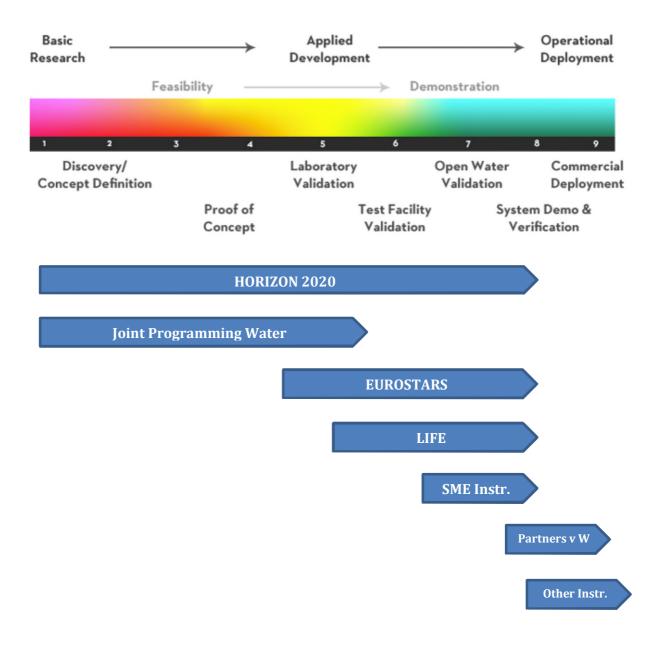
Others:

- <u>DSU / EIA:</u> The Dutch Sustainability Unit (DSU) supports the Dutch Ministry of Foreign Affairs (MFA) and its embassies in ensuring that its activities contribute to sustainable development with a focus on climate, environment and gender equality. Support is free of charge within the limitations of the available budget.
- <u>FMO</u>: FMO provides through the FOM-OS program medium- and long-term loans between 1 and 5 million euro to companies or joint ventures in developing countries (DGGF countries) that are majority owned or controlled by Dutch enterprises.
- Export Credit Insurance (EKV)/ Export Credit Guarantee Facility (EKG): To hedge payment and other risks of export and investment transactions, Dutch entrepreneurs can use the Export Credit Insurance Facility and the Export Credit Guarantee, both operated by Atradius Dutch State Business.

Innovation Instruments

1	Eurostars	Eurostars is a market oriented R&D program for high tech SME's. Large companies and research institutes can also join.
		Eurostars is a bottom up program and open for all technology fields.
		In Eurostars 29 European countries participate but also Israël and South Korea. Participants need to collaborate with at least one foreign partner.
		Funding comes from national government and with a top up of the EC In the Netherlands the Ministry of Economic Affairs is responsible for the Eurostars program
2	Horizon 2020	Horizon 2020 is the Flagship EC initiative on R&D with a focus on Excellent Science, Industrial Leadership and Societal Challenges. Horizon 2020 has a budget of EUR 74 billion.
3	SME Instrument	Part of Horizon 2020 with a specific SME instrument on: 1) feasibility, 2) demonstration and 3) commercialisation.
4	EU Joint Programming Initiative on Water	Initiative of EU member states and the EC on developing a strategic roadmap on water. Calls will be published in 2015 and beyond. Funding comes from national governments and with a top up of the EC.
		Min I&E is in charge of the Water JPI with support of RVO
5	LIFE programme	EU program on Environmental technology development of nature restoration / conservation. Open for public and private entities.
6	Enterprise Europe Network	Matchmaking facility. Bringing technology request and offers together in- and outside Europe.
	(EEN Network)	and salende Europei
7	Technology Matchmaking	Organizing tailor made missions to emerging and industrialised countries with a specific focus on joint innovation.
8	MIT regeling (national instrument)	MKB <i>Innovatie Stimulering Topsectoren</i> . R&D funding for Dutch SME's for R&D projects within Dutch Top sectors

TECHNOLOGY READINESS LEVELS



ANNEX 6 ACTIVITIES OUTSIDE THE 6.2 SBE'S

Country	Project name	Relation	Budget 2006-2015
Worldw ide	LCDF for climate change	WB	€ 45.000.000
Suriname	Bijdrage dijken	Min. van planning &	5 00 000 000
Worldw ide	ASAP	ontwikkelingssamenwerking IFAD	€ 26.000.000
Senegal	OMVS trustfund 2	WB	€ 20.000.000
Kenya	NAI AWF 2012 - 2016	African Wildlife Foundation	€ 9.500.000
South Sudan	JBA ProWaS/SSN-EES	Multiple Parties	€ 8.748.218
South Sudan	ProWas/SSN Lakes	·	€ 7.043.620
		Multiple Parties	€ 6.675.355
Worldw ide	IUCN caring for nature	IUCN	€ 6.427.377
Mongolia	IWRM Main Phase	Ministry of Nature & Environment	€ 5.990.443
Senegal	SN OMVS Water/Environment	WB	€ 5.874.041
Regional Africa	SN OMVS-Water/Environment	WB	€ 3.968.090
Colombia	Integraal Waterbeheer	ASOCARS	€ 3.806.671
Worldw ide	Payments Water Services phase 2	WWF	€ 3.167.488
Worldw ide	TMF 2006 GWA	Gender & w ater alliance	€ 2.975.000
Kenya	NA I SUSTAINABLE LANDSCAPES	African Conservation Centre	€ 2.973.664
Worldw ide	TMF 2006 Ned. Vrouw enraad	Nederlandse Vrouw en Raad	
Worldw ide	GWP core bijdrage 2002-2006	GWP	€ 2.296.708
Indonesia	Master Plan EMRP	Euroconsultant Mott McDonald	€ 2.250.000
Worldw ide	Adapts - IVM	Vrije Universiteit Amsterdam	€ 1.982.396
Worldw ide	WWF Poverty & nrm	WWF	€ 1.924.780
Worldw ide	IWMI 2009	IWMI	€ 1.603.310
Palestinian auth.		FAO	€ 1.489.502
	RAM Area C Agricultural Wells		€ 1.374.200
Regional Latin-America		Wageningen Universiteit	€ 1.180.220
Worldw ide	IWMI 2007-2008	IWMI	€ 1.064.785
South Sudan	IWRM Imatong Mountains	African Wildlife Foundation	€ 914.239
Regional Africa	DCO ATPS V Water & Environment	ATPS	€ 676.902
Worldw ide	RVO DSS Facility Water	RVO	€ 675.276
Mali	BAM-GIRENS	GIRENS	€ 657.663
Worldw ide	Genereren van kennis en ervaring met	WMI	
Mali	betrekking tot optimaal gebruik van BAMARPON IV bis/PNIR	Country-based NGO group	€ 328.984
	I		€ 248.137

ANNEX 7 ACTIVITIES IN THE CATEGORY OTHER (> EUR2,000,000)

Country	Project name	Relation	Budget 2006-2015
Worldw ide	LCDF for climate change	WB	€ 45.000.000
Suriname	Bijdrage dijken	Ministerie van planning & ontw ikkelingssamenw erking	€ 26.000.000
Worldw ide	Program. Onder. UNESCO-IHE	UNESCO-IHE	€ 23.976.766
Regional Asia	Water Financing Facility	A DB	€ 18.164.290
Worldw ide	Sustainable Water Fund 1	RVO	€ 15.905.429
Worldw ide	WPP-2 WB 2012-2016	WB	€ 14.000.000
Ethiopia	AAU Science Faculty	Addis Abeba University	€ 9.000.000
Kenya	NAI AWF 2012 - 2016	African Wildlife Foundation	€ 8.748.218
South Sudan	JBA ProWaS/SSN-EES	Multiple Parties	€ 7.043.620
South Sudan	ProWas/SSN Lakes	Multiple Parties	€ 6.675.355
Mozambique	Sectoral Support Water ASAS	Ministry of Public Works & Housing	€ 6.665.174
Worldw ide	IUCN caring for nature	IUCN	€ 6.427.377
Worldw ide	PPP NWP YEP fase I	NWP	€ 6.256.465
Worldw ide	Intensivering water OS	RVO	€ 5.896.909
Worldw ide	DME A4A PPP Innovation Progr.	Aqua for all	€ 5.730.000
Bangladesh	UNDA F-UNDP IWM	UNDP	€ 5.693.054
Worldw ide	GWP strategy 2011-2013	GWP	€ 5.600.000
Bangladesh	River Management Project	A DB	€ 5.167.080
Vietnam	Natural Disaster Risk Management	WB	€ 4.639.396
Worldw ide	WANI 2	IUCN	€ 4.527.664
Mozambique	Waternet Phase 3	Waternet	€ 4.470.734
Worldw ide	UNDP CapNet phase 3	UNDP	€ 4.273.500
Bangladesh	IFC partnership for clean textile	IFC	€ 3.920.000
Vietnam	HAN Red River Basin II Project	ADB	€ 3.906.397
Worldw ide	Payments Water Services phase 2	WWF	€ 3.167.488
Mozambique	Waternet Phase 2b	Waternet	€ 3.105.000
Jemen	PAWS-NWRA 2007-2009	National Water Resources	
Worldw ide	TMF 2006 GWA	Authority Gender & water alliance	€ 3.002.713
Kenya	NA I SUSTA INA BLE LA NDSCA PES	African Conservation Centre	€ 2.975.000
Bangladesh	DHA Estuary Dev. Prog.	ERD	€ 2.973.664
Bangladesh	Urban Dredging Project	Vitens International	€ 2.805.818
Indonesia	Dredging pilot Jakarta	RVO	€ 2.600.000
Bangladesh	Urban Dredging Project.	Vitens International	€ 2.472.117
Worldw ide	TMF 2006 Ned. Vrouw enraad	Nederlandse Vrouw en Raad	€ 2.433.000 € 2.206.709
Worldw ide	GWP core bijdrage 2002-2006	GWP	€ 2.296.708 € 2.250.000
Worldw ide	IGG DUPC-2 2016-2020	UNESCO	€ 2.250.000
Worldw ide	CapNet Phase 2	UNDP	€ 2.200.000
Worldw ide	GWP 2014-2018	GWP	€ 2.119.000
	I		€ 2.000.000

ANNEX 8 ACTIVITIES OF MULTILATERAL ORGANISATIONS (> EUR2,000,000)

Country	Project name	Relation	Budget 2006-2015
Worldw ide	LCDF for climate change	WB	€ 45.000.000
Worldw ide	Program. Onder. UNESCO-IHE	UNESCO-IHE	€ 23.976.766
Worldw ide	ASAP	IFAD	€ 20.000.000
Regional Asia	Water Financing Facility	ADB	€ 18.164.290
Bangladesh	DHA EDDRP	ADB	€ 17.054.496
Regional Africa	ICRAF Food and Water Security	WB	€ 16.314.415
Worldw ide	WPP-2 WB 2012-2016	WB	
Bangladesh	DHA SSWRSDP II	ADB	€ 14.000.000
Indonesia	Participatory Sector Irrigation Project	ADB	€ 11.224.665
Indonesia	JAK WISMP Water Program	WB	€ 11.016.500
Bangladesh	Integrated Watermanagement SW	ADB	€ 9.649.683
Senegal	OMVS trustfund 2	WB	€ 9.627.080
Vietnam	Flood Management and Mitigation	MRC	€ 9.500.000
Regional Africa	DME/CIWA Worldbank 2013-2020	WB	€ 8.960.889
-			€ 7.500.000
Senegal	SN OMV S Water/Environment	WB	€ 5.874.041
Bangladesh	UNDA F-UNDP IWM	UNDP	€ 5.693.054
Bangladesh	River Management Project	ADB	€ 5.167.080
Vietnam	Natural Disaster Risk Management Program	WB	€ 4.639.396
Worldw ide	UNDP CapNet phase 3	UNDP	€ 4.273.500
Indonesia	WRM Citarum	ADB	€ 4.263.520
Regional Africa	SN OMVS-Water/Environment	WB	
Bangladesh	IFC partnership for clean textile	IFC	€ 3.968.090
Vietnam	HAN Red River Basin II Project	ADB	€ 3.920.000
Pakistan	UNDP Wetlands Project	UNDP	€ 3.906.397
Pakistan	One UN environment JPC-3	UNDP	€ 3.147.410
Bangladesh	Small Scale Irrigation FFS in polders	FAO	€ 2.563.125
Worldw ide	IGG DUPC-2 2016-2020	UNESCO	€ 2.209.500
			€ 2.200.000
Worldw ide	CapNet Phase 2	UNDP	€ 2.119.000
Bangladesh	Water Management Improvement Project		€ 2.040.000
Regional Latin-America	IDB Water Partnership Fund	IADB	€ 2.025.140

ANNEX 9 ACTIVITIES SELECTED FOR IN-DEPTH STUDY

Water productivity

Bangladesh – Blue Gold (2012-2020, EUR 50 million, tendered and contribution arrangement with GoB)

Justification:

Blue Gold adheres to the water productivity policy objective. However, the project is broader in the sense that decentralised management of polders and its infrastructure adheres to the second policy objective as well. Also, investments in both water management infrastructure and capacity building at WUA level are foreseen, making it possible to identify impacts at household level.

Objectives:

- 50000 households less in poverty
- 850 cooperatives are functioning
- 80000 households have improved their food security

Strategy:

Farmer cooperatives are created and mobilised. For each cooperative a plan is made with respect to water management and agricultural extension services. Infrastructure is rehabilitated by the BWDB in consultation with the cooperatives. Also, cooperatives will execute activities that help their members improve their access to value chains such as credit services. Because of this, the members will see the necessity and benefits of the cooperative and therefore more willing to support it, increasing the effectiveness and sustainability.

Indonesia – Participative sector irrigation project (2004-2011(2014), \$ 15 million, ADB trust fund)

Justification:

The participative sector irrigation project adheres to the water productivity policy objective, although this objective was introduced only in 2012. However, due to its nature this project should provide interesting insights that relate to water productivity. Also, due to the projects nature; it includes capacity development at water user and all government levels and it tries to link irrigation planning to district, province and basin planning, it adheres to the second policy objective as well. Lastly, investments in both water management infrastructure and capacity building at WUA level were part of the project, making it possible to identify impacts at household level.

Objectives:

- Sustainable, decentralised management of irrigation infrastructure
- Increased yields from irrigated agriculture

Strategy:

Creation/strengthening of 6250 water user groups and federations and the training of 36250 farmers on irrigation management skills. Then, irrigation infrastructure is rehabilitated and ownership transferred to water user groups. Also, at district level the formulating of directives and policies with respect to water management and the drafting of irrigation management plans is supported.

Egypt – Better irrigation service IIIMP (2005-2015, EUR 20 million, tendered and contribution arrangement with WB and MWRI)

Justification:

IIIMP adheres to the water productivity policy objective although it started before this policy objective was introduced. However, the project is still expected to provide useful insights related to this policy objective. Also, the broad nature of this project including decentralisation and empowerment of local water users make it interesting for the second policy objective as well.

Objectives:

- Introduction and development of sustainable, decentralised, participative water user groups.
- Mainstreaming the role of women
- Improvement of environment
- Efficient irrigation techniques disseminated to farmers
- Strengthening the capacity of local partners

Strategy:

Capacity building before rehabilitation of infrastructure to ensure the sustainability of investments. 3000 water user groups will be created at Mesqa-level and 144 at canal-level. At district level 48 planning boards are created. Also the national water institution will be reorganised and a M&E system will be introduced.

Regional Africa Sahel and Horn of Africa: ICRAF food and water security (2013-2018, EUR 40 million, WB CGIAR fund)

Justification:

ICRAF adheres to the water productivity policy objective. Also, impact at household is to be expected. The program started only recently and due to the innovative character of the project, impact at this stage is not likely to be identified. Therefore, project documents will be used to assess the progress of the project.

Objectives:

- Improvement in water and food security
- Commercialisation of rural economy
- Creation of an enabling political and institutional environment

Strategy:

Up scaling of proven techniques that lead to more water efficiency in agriculture. Improved water management at the farm level through construction of small water retention infrastructure and improved water management skills of farmers. At watershed level through drafting and implementation of water management plans. Commercialisation of rural economy through improved access to value chains and credit. An enabling institutional and political environment through adaptations to existing legislature and organizing farmer groups to influence policy making.

Water management plans

Bangladesh: Formulation of Bangladesh Delta Plan 2100 (2013-2017, EUR 7.7 million, MFA of finance GoB)

Justification:

The Bangladesh Delta Plan 2100 adheres to the second policy objective. By choosing a plan which is still in its development stage it is possible to evaluate the process of drafting, which is considered very important if the plan is to be inclusive and broadly accepted which will increase the likelihood of implementation.

Objectives:

- To support an enabling social-political climate for the BDP 2100 drafting and implementation process
- To create a common and inclusive and documented knowledge base on water, land and related natural resources and spatial planning in Bangladesh delta.
- To develop a Delta Framework encompassing all necessary and agreed upon reforms of the current institutional framework.
- To create together with main stakeholders a delta vision
- To facilitate entrepreneurship of the private sector
- To promote regional and sectorial developments in the short term for future improvements of governance of water, land and related resources and spatial planning in Bangladesh delta

Strategy:

Objectives should be achieved through stakeholder participation, thematic studies, scenario development and scenario calculations and direct interaction with the 5-years-planning system.

Jakarta: Coastal Development Program: master planning phase

Justification:

The Jakarta Coastal Develop Program (JCDP) adheres to the third policy objective. It provides an interesting case in an important partner country. It is also implemented by RVO, as such it can serve as an interesting example of the involvement of the Dutch water sector.

Objectives:

- The PMU will be firmly established and capable of directing the planning and implementation of a Jakarta Coastal Defence System;
- The PMU will through the implementation phase evolve into an asset management organisation which has the capacity to manage and maintain the Jakarta Coastal Defence System as realised under the JCDS programme.

Strategy:

The Netherlands support to the Programme Management Unit of JCDS, which is a main component of this project phase, will focus on the role of the PMU as an asset management organisation.

The Netherlands support to the second component of the project, the actual master planning will on the one hand maintain the integrated character of the JCD Strategy but at the same time focus on the establishment of an appropriate coastal defence system. The master planning phase will not elaborate detailed programmes and plans for all the different sectoral issues and programmes like harbour development and transport but formulate adequate linkages (spatial aspects, design criteria, necessary outputs and outcome etc) with such sectoral programmes.

Egypt - NWRP coordination (2007-2011, EUR 5.4 million, MFA of water resources & irrigation)

Justification:

NWRP coordination adheres to the second policy objective in that it tries to improve water management at national level through improved planning and management. It is part of a sector-wide approach through individual projects. As such it supplements the other activities in Egypt adhering to the other policy objectives.

Objectives:

- To create a receptive and supportive environment for the implementation of the NWRP with all stakeholders at the different levels.
- To enhance co-ordination and decision making capacity of the National Water Council, technical committee and in the governorates
- To enhance capacity of NWRP and GWRP units for:
 - o Planning and ex-ante impact assessment

- o Communicate and transfer information
- o Cooperation and coordination
- o Process management
- To enhance NWRP planning procedures in partner ministries, governorates and between levels
- To monitor and evaluate impact ex-post

Strategy: To support through several activities the planning and decision-making capacities of several water management authorities at different levels.

Regional Africa – GWP nation IWRM plans (2004-2007, EUR 6.4 million, GWP)

Justification:

GWP nation IWRM plans adheres to the second policy objective. This activity is a good example of the focus on IWRM plans which was stressed in the first years of the evaluation period.

Objectives:

- Drafting of IWRM-plans for six sub-Saharan countries (including Mozambique)
- Institutional development of existing and new partnerships
- Integrating water in activities aimed at poverty reduction
- Designing innovative and practical financing instruments for integrated water management

Strategy:

Developing and including multi-stakeholders groups at all levels and making sure these groups included in policy making. Delivering technical input to the planning process; creation and strengthening regional and national partnerships through training and multi-stakeholder platforms.

Transboundary water management

Mozambique – IncoMaputo 2-Prima (2007-2010, EUR 7.35 million, National Water Directorate)

Justification:

IncoMaputo 2-Prima adheres to the third policy objective, together with earlier MFA activities that supported the management of the Incomati and Maputo rivers by its riparians countries.

Objectives:

- To promote cooperation among the parties to ensure protection and sustainable utilisation of the water resources of the Incomati and Maputo watercourse.

Strategy:

To ensure sustainable cooperation between the parties the Tripartite Permanent Technical Committee is supported in executing activities based on the Activity and Action Plan which was agreed upon in the Interim IncoMaputo Agreement. Eventually, in 10 years this should lead to the signing of a comprehensive agreement between the parties.

Mozambique - Cooperation program (2013-2017, EUR 3.5 million, National Water Directorate)

Objectives:

 To achieve water security and water safety for poverty alleviation, economic development, sustainable investments and inclusive growth.

Strategy:

Support to establish a river basin organisation for the Incomati and Maputo rivers. The Interim IncoMaputo Agreement is to be amended to regulate the (financial) commitments of the riparian countries to the basin organisation.

Vietnam – The Flood Management and Mitigation Project (2004-2010, EUR 11.5 million, Mekong River Commission)

Justification:

Support to the Mekong River Commission (MRC) adheres to the third policy objective. Also, MFA has been supporting to the MRC for a long time which will provide insights of this support, given that trans-boundary water management is often a long-term process. The MRC is a relatively advanced river basin commission. As such it is expected to be interesting to assess the added value of MFA support.

Objectives:

Overall objective: people's suffering and economic losses due to floods are prevented, minimised or mitigated, while preserving the environmental benefits of floods.

Immediate objectives:

- 1) A regional Flood Management and Mitigation Centre, maintaining the availability of important flood-related tools, data, and knowledge; producing accurate regional forecasts with a sustainable lead time and a timely and effective dissemination; and providing accurate, well documented and consistent tools for basin-wide flood risk assessment and trans-boundary impact analysis.
- 2) A reduced vulnerability of society to floods, and a reduced risk of flood disasters caused by failure or inappropriateness of structural interventions. A reduced vulnerability to flooding and reduced flood damages at family, community and sub-regional levels. This will be achieved by reducing the disruption of normal activities during and after flood, and by providing people with the security and motivation necessary to make and sustain improvements in their economic and social welfare in environment that is frequently affected by floods.
- 3) Enhanced mediation and coordination capacity of the MRC in issues of non-compliance in flood management.
- 4) Competence in flood preparedness and flood mitigation strengthened, consolidated and readily available with communities, emergency managers and civil authorities, as required at each management level.
- 5) Institutional, human resources and technical support being available to sustainable land management and improved land use planning integrated into floodplain management and mitigation in the Lower Mekong Basin.

Strategy:

A Regional Flood Management and Mitigation Centre will be financed that will serve as focal point for research, data collection and dissemination of information of flooding and flooding preparedness in the Mekong basin.

Senegal - OMVS trust fund 2 (2009-2012, EUR 9.5 million, WB trust fund)

Justification:

OMVS trust fund adheres to the third policy objective, together with earlier activities that supported the OMVS listed below. This offers insights in the results of long-term MFA assistance to the OMVS.

Objectives:

- An increase in the use of the Senegal river by the population as a source for drinking water, irrigation, fisheries and livestock farming.

Strategy:

Partially removing water hyacinth from the banks of the river. Also, the local population is trained to keep the banks clear after initial removal.

Senegal - OMVS-Water/Environment (2004-2007, EUR 7.5 million, WB trust fund)

No specific objectives or strategy. First part of long-term support to the OMVS, which aims to introduce IWRM in the river basin, remove water hyacinth and create/strengthen water user groups.

Senegal - OMVS Water/Environment (2008-2011, EUR 0.9 million, WB trust fund)

Extension of previous activity including a study of the prevalence of water hyacinth in preparation for OMVS trust fund 2.

Egypt - Nile Basis Initiative

Justification

In the Nile basin support has been provided to the Nile Basin Initiative (NBI), which started in 1999, led by the World Bank. The NBI trust fund, to which the GoN contributed \$ 38 million, was initiated in 2001 to coordinate donor efforts in the Nile basin.

Objective:

- The NBI tries to improve trans-boundary water management between the riparian countries of the Nile (Egypt, Sudan, Ethiopia, Uganda, Kenya, Tanzania, Burundi, Rwanda, the Democratic Republic of Congo (DRC) and Eritrea as an observer) through a dialogue that was to lead to a shared vision between the countries.

Strategy

The shared vision is to be a Basin-wide program that focuses on building institutions, sharing data and information, providing training and creating avenues for dialogue and region-wide networks for joint problem-solving, collaborative development, and developing multi-sector and multi-country programs of investment to develop water resources in a sustainable way.

ANNEX 10 LIST OF FINAL EVALUATIONS

Country	Project name	Relation	Budget 2006-2015
Worldw ide	ASAP	IFAD	€ 20,000,000
Bangladesh	Blue Gold	Recipient Government Group	€ 16,861,497
Regional Africa	ICRAF Food and Water Security	WB	€ 16,314,415
Worldw ide	Sustainable Water Fund 1	RVO	€ 15,905,429
Bangladesh	Char development & settlement project 3	ERD	€ 8,164,683
Mali	BAM-PADIN II	Care	€ 7,767,916
South Sudan	JBA ProWaS/SSN-EES	Multiple Parties	€ 7,043,620
Bangladesh	IPSWAM	Euroconsultant Mott McDonald	€ 6,902,465
South Sudan	ProWas/SSN Lakes	Multiple Parties	€ 6,675,355
Worldw ide	IUCN caring for nature	IUCN	€ 6,427,377
Worldw ide	PPP NWP YEP fase I	NWP	€ 6,256,465
Worldw ide	DME A4A PPP Innovation Progr.	Aqua for all	€ 5,730,000
Pakistan	Indus for all programma	WWF	€ 5,455,894
Bangladesh	Dialogue for Sustainable Management of	IUCN	€ 5,060,017
Bangladesh	Trans-Boundary Water Regimes in Formulation BDP 2100	Recipient Government Group	€ 5,024,965
Vietnam	Natural Disaster Risk Management	WB	€ 4,639,396
Mali	Program BAM Contrat Plan ON 2005/07	Office Du Niger	€ 4,503,136
Mozambique	Waternet Phase 3	Waternet	€ 4,470,734
Vietnam	HAN Red River Basin II Project	ADB	€ 3,906,397
Regional Africa	GWP nation IWRM plans	GWP	€ 3,853,085
Colombia	Integraal Waterbeheer	ASOCARS	€ 3,806,671
Indonesia	Master Planning Jakarta Coast	RVO	€ 3,500,000
Mali	GIRENS 2	MINENERML	€ 3,338,266
Guatemala	Water Management Chor'ti	ASORECH	€ 3,252,114
Pakistan	UNDP Wetlands Project	UNDP	€ 3,147,410
Mozambique	Waternet Phase 2b	Waternet	€ 3,105,000
Mali	BAM_PASARC/NEF	NEF	€ 3,064,790
Regional great lakes	Lake Kivu Monitoring Progr.	Ministry of infrastructure & energy	€ 2,921,088
Kenya	WWF-IWRAP	WWF	€ 2,919,436
Benin	PPEA Gestion Intégrée (GIRE)	le Ministère du Développement, de l'Economie et des Finances	€ 2,681,497

Country	Project name	Relation	Budget 2006-2015
Bangladesh	DHA CDSP-III - TA	Euroconsultant Mott McDonald	€ 2,285,342
Regional Asia	Crossing Boundaries Water	Wageningen Universiteit	€ 2,275,468
Worldw ide	GWP core bijdrage 2002-2006	GWP	€ 2,250,000
Regional Latin-America	IDB Water Partnership Fund	IADB	€ 2,025,140
Regional Africa	SADC HYCOS phase 2	SADC	€ 1,936,163
Benin	COT PPEA II GIRE GOV	le Ministère du Développement, de	€ 1,841,683
Guatemala	Tacana 2	l'Economie et des Finances IUCN	€ 1,818,055
Vietnam	Water Resources University phase 2	Ministry of agriculture & rural development	€ 1,674,924
Bolivia	Tarija Watershed Program	Prefectura de Tarija	€ 1,600,000
Vietnam	HCMC Flood Management	People Committee of Ho Chi Ming City	€ 1,509,112
Worldw ide	Urbanising deltas of the world	NWO	€ 1,420,485
Bangladesh	DHA BRAC/CDSP-III	BRAC	€ 1,277,355
Bolivia	Risk management program Beni	Ministerio del Agua	€ 1,249,553
Pakistan	Indus for all programma - Partnership	WWF	€ 1,016,040
Pakistan	ISL BRMP TA Water Component	ADB	€ 993,543
Egypt	KAI Water Quality Mngt Unit/CA	MWRI	€ 938,983
Guatemala	GUA gestion indigena de cuenca	Fundacion defensores de la naturaleza	€ 714,362
Mali	BAM-GIRENS	Girens	€ 657,663
Worldw ide	DML Input WWF in de Dialogue	WWF	€ 371,158
Mali	BAM ARPON IV bis/PNIR	Country-based NGO group	€ 248,137

ANNEX 11 DEFINITIONS

Partners	Stakeholders that are involved in the governance or financing of a
Outcomes	The achieved or likely short-term and medium term effects of the outputs of a development intervention
Outputs	The products, capital goods and services which result from a development interventions; may also include changes as a result of the intervention which are relevant for the achievement of outcomes
Integrated Water Resource Management	Integrated water resources management refers to a process that promotes coordinated development and management of freshwater and related resources to maximise the resultant economic and social welfare in an equitable manner without compromising vital ecosystems. IWRM takes into account all sources and users of freshwater within a well-defined physical area, such as water shed or river basin.
International/ transboundary water resources	Water resources that span political boundaries, such as rivers that flow through several countries, lakes or inland seas with several riparians and aquifers underlying two or more countries.
Indicator	A quantitative or qualitative factor or variable that provides a simple and reliable means to measure achievement, to reflect changes connected to an intervention, or help assess the performance of a development sector.
Impact	Positive and negative, primary and secondary effects produced by the development intervention, directly or indirectly, intended or unintended.
Governance	Good governance relates to structures, functions and processes put in place towards achieving objectives, in particular with respect to stakeholder participation, water development regulation, compliance, decisive water management, financing and cost recovery, (international) arbitration and conflict resolution, transparency in decision making and accountability.
Gender	The term "gender" refers to the socially-constructed differences between men and women, as distinct from "sex", which refers to their biological differences. Conversely, attention to gender-based differences in activities, resources and benefits can improve the outcomes of development interventions.
Efficiency	Efficiency relates to the reasonable relation between inputs and outputs in terms of costs of outputs and outcomes (compared to bench marks).
Effectiveness	Effectiveness is defined as the extent to which the direct results of interventions at water system and/ or final beneficiary group level (the outputs) contribute to the sustainable achievement of policy objectives (outcomes).
Donors	Organisations or entities that have provided financial or in-kind resources

	program or project
Public good	Goods that produce benefits that are non-rival (many people can consume, use or enjoy the good at the same time) and non-excludable (it is difficult to prevent people who do not pay for the good from consuming it). If the benefits of a particular public good accrue across all or many countries, then the good is deemed a global or international public good
Relevance	The extent to which the objectives and design of a program are consistent with the (a) challenges and concerns in a particular development sector and (b) the needs and priorities of beneficiary countries and groups
Stakeholders	The parties who are interested in or affected, either positively or negatively, by a program. Stakeholders are often referred to as "direct" and "indirect" or "other" stakeholders. While other stakeholders such as taxpayers, and other indirectly affected parties may have interests as well, these are not ordinarily considered in evaluations unless a principal stakeholder acts as their proxy.
Sustainability	Sustainability is defined as the (probability of) continuation of benefits after major development assistance has been completed.
Transparency	As a criterion for assessing governance and management, the extent to which a program's decision-making, and evaluation processes are open and freely available to the general public. This is a metaphorical extension of the meaning used in physical sciences – a "transparent" objective being one that can be seen through

ANNEX 12 REFERENCES

- 1. Abrams, L., Peck, L., Sandström, K. (2000) Swedish initiative for support of sustainable management of water resources in Southern Africa. Stockholm: Sida
- 2. Allison, G. (1971). Essence of Decision: Explaining the Cuban Missile Crisis. Boston: Little Brown.
- 3. Dutch Government (2009) National Water plan 2009-2015. Deventer: Author
- 4. Hellegers, P.J.G.J. (2011) Water: the most valuable asset. Wageningen
- 5. IEG World Bank (2010) An Evaluation of World Bank Support 1997-2007 Water and Development. Washington D.C.: Author
- 6. IEG World Bank (2011) Water and Development: taking lessons from evaluations. Summary of discussions at the Berlin Conference. Washington D.C.: Author
- 7. IEG (2010) Global Program Evaluation Global Water Partnership. Washington D.C.: Author
- 8. IOB (2011) More than water. Impact evaluation of drinking water supply and sanitation interventions in rural Mozambique (IOB publication no. 360) Den Haag: Author
- 9. IOB (2011) The risk of vanishing effects: Impact evaluation of drinking water supply and sanitation programs in rural Benin (IOB publication no. 357) Den Haag: Author
- 10. IOB. (2010) Institutional Development, Netherlands support to the water sector 1988-1998. (IOB publication no. 284) Den Haag: Author
- 11. Jägerskog, A., Zeitoun, M. (2009) Getting trans-boundary water right: theory and practice for effective cooperation (SIWI Report no. 25) Stockholm: SIWI
- 12. Jeffrey, P., Gearey, M. (2006) Integrated water resources management: lost on the road from ambition to realization? *Water Science and Technology*, 53(1), 1-8
- 13. Kemp de, A., Faust, J., Leiderer, S. (2011) Between high expectations and reality: An evaluation of budget support in Zambia (2005-2010) Stockholm: Sida
- 14. Leeuw, F., Vaessen, J. (2009) Impact evaluations and development. Washington D.C.: NONIE
- 15. Mayne, J. (2001) Addressing attribution through contribution analysis: using performance measures sensibly. *Canadian Journal of Program Evaluation*, 16(1), 1–24.
- 16. Medema, W., McIntosh, B.S., Jeffrey, P.J. (2008) From premise to practical, a critical assessment of integrated water resources management and adaptive management approaches in the water sector. *Ecology and Society*, 13(2), 1-17
- 17. MFA of Economic Affairs, Agriculture and Innovation (2011) Letter to the Dutch Parliament 'Naar de top; het bedrijvenbeleid in actie(s)' (A/TOP/11134377)
- 18. MFA of Foreign Affairs (2014) Reaction to *Motie* Voordewind (33750, nr.38)
- 19. MFA of Foreign Affairs (1998) Policy priorities for Netherlands development assistance, Water for the Future, integrated water resources management Den Haag: Author
- 20. MFA of Foreign Affairs (2001) Achieving water security Den Haag

- 21. MFA of Foreign Affairs (2002) Sector wide approach for water and sanitation development Den Haag: Author
- 22. MFA of Foreign Affairs (2006-2013) Explanatory memoranda to the budgets. Retrieved from: http://www.rijksbegroting.nl/
- 23. MFA of Foreign Affairs (2012) Letter to the Parliament: "Water voor Ontwikkeling" (DME/MW-004/2012)
- 24. MFA of Foreign Affairs (2013) "Wat de wereld verdient, een nieuwe agenda voor hulp, handel en investeringen" (BIS-049-2013)
- 25. Mostert, E., Barraqué, B. (2006) Trans boundary river basin management in Europe. Thematic paper for Human development Report 2006, 21. Europe: UNDP
- 26. Mostert, E. (2005) How can international donors promote trans boundary water management? Bonn: German Development Institute
- 27. Netherlands Water Partnership (2011) Wereldleiders in water, Toekomst visie voor de water sector 2020 Den Haag: Author
- 28. Parliamentary Committee (2012) General consultation on Water for Development policy (32605 no. 74)
- 29. Perry, C.J. (2003) Non-State actors and Water Resources Development: An Economic Perspective. *Non-State Actors and International Law*, 3, 99-110
- 30. Scheumann, W., Neubert, S. (2006) Recommendations on development cooperation in transboundary water management. Bonn: German Development Institute
- 31. Second World Water Forum and Ministerial Conference (2000) Vision 21: Water for People Geneva: Water Supply & Sanitation Collaborative Council
- 32. Timmerman, J.G., Koeppel, S., Bernardini, F., Buntsma, J.J. (2011) Adaptation to climate change: challenges for trans-boundary water management. *The economic, social and political elements of climate change, climate change management,* 4, 523-541
- 33. Wirkus, L., Böge, V. (2006) Trans-boundary water management on Africa's international rivers and lakes: current state and experiences. Bonn: German Institute for Development
- 34. Wolff, H.P., Wolf, L., Subah, A., Guttman, A., Tamimi, A., Jarrar, A., Salman, A., Karablieh, E. (2012) Methodological challenges in evaluation performance, impact and ranking of IWRM strategies in the Jordan valley. *Water Science and Technology*, 66.7, 1407-1415
- 35. Van der Zaag, P., 2007. Asymmetry and equity in water resources management; critical governance issues for Southern Africa. *Water Resources Management* 21 (12): 1993-2004
- 36. Van der Zaag, P., I.M. Seyam and H.H.G. Savenije, 2002. Towards measurable criteria for the equitable sharing of international water resources. *Water Policy* 4(1): 19-32 [doi:10.1016/S1366-7017(02)00003-X]
- 37. Zeitoun, M., Warner, J. (2006) Hydro-hegemony a framework for analysis of transboundary water conflicts. *Water Policy*, 8, 435-460

ANNEX 13 LIST OF ABBREVIATIONS

ADB Asian Development Bank

EM Explanatory Memorandum to the budget

GWP Global Water Partnership

IOB Policy and Operations Evaluation Department

IWRM Integrated Water Resources Management

MASP Multi-annual Strategic Plan

MEA Ministry of Economic Affairs

MFA Ministry of Foreign Affairs

MI&E Ministry of Infrastructure and Environment

MoF Ministry of Finance

NGO Non-Governmental Organisation

NL Netherlands

NWP Netherlands Water Partnership

0&M Operation and Maintenance

PPP Public Private Partnership

RPE Order on Periodic Evaluation and Policy Information

RVO Netherlands Enterprise Agency

ToC Theory of Change

ToR Terms of Reference

IGG Inclusive Green Growth

WB World Bank

UN United Nations

wm water management

WUA Water Users Association