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Central project evaluation

Support to Integrated Water Resources Management
in Morocco (AGIRE III)

Project number 2016.2057.4

Evaluation Report

On behalf of GIZ by Hans Hartung and Ehssan El Meknassi Youssoufi Ehssan (FAKT Consult)

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The Evaluation Unit commissioned external independent evaluators to conduct the evaluation. This evaluation report was written by these external evaluators. All opinions and assessments expressed in the report are those of the authors.

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Abbreviations

ABH	Agence de Bassin Hydraulique
AFEMAC	Association France et Maroc au Cœur
AGIRE	Appui à la Gestion Intégrée des Ressources en Eau
AUEA	Associations d'Usagers des Eaux Agricoles
BMZ	German Federal Ministry for Economic Cooperation and Development
DRPE	Direction de la Recherche et de la Planification de l'Eau
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH
IWRM	Integrated water resources management
METLE	Ministère de l'Équipement du Transport, de la Logistique et de l'Eau
MOI	Module objective indicator
OECD/DAC	Development Assistance Committee of the Organization for Economic Co-operation and Development
ORMVA	Office Régional De Mise En Valeur Agricole
PNE	Plan National de l'Eau
SDC	Swiss Agency for Development and Cooperation
SDG	Sustainable Development Goal

The project at a glance

Morocco: Appui à la Gestion Intégrée des Ressources en Eau (AGIRE III)
(Support to Integrated Water Resources Management)

Project number	2016.2057.4
Creditor reporting system codes	14010 – Water sector policy and administrative management (70%) 14015 – Preservation of water resources (10%) 14032 – Basic water infrastructure (20%)
Project objective	La gestion intégrée des ressources en eau (GIRE) tenant compte des effets du changement climatique est améliorée. Integrated water resources management (IWRM) considering the effects of climate change is improved.
Project term	January 2017 – June 2020
Project value	EUR 7,642,857
Commissioning party	German Federal Ministry of Economic Cooperation and Development (BMZ) and Swiss Agency for Development and Cooperation (SDC)
Lead executing agency	Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH
Implementing organisations (in the partner country)	Ministry of Equipment, Transport, Logistics and Water (Ministère de l'Équipement du Transport, de la Logistique et de l'Eau, METLE), Agences de Bassin Hydraulique (ABHs) Tensift, Souss-Massa-Drâa and Oum Er-Rbia
Other development organisations involved	n/a
Target group(s)	Direct target group: inhabitants of the Tensift, Souss-Massa-Drâa and Oum Er-Rbia river basins; professional and managerial staff in the relevant sectoral ministries, regional and local authorities, universities and research institutes Indirect target group: population of Morocco

1 Evaluation objectives and questions

1.1 Objectives of the evaluation

AGIRE III is part of the Evaluation Unit's random sample. The evaluation that was carried out is a final evaluation. The main stakeholder groups involved in the evaluation were:

- the AGIRE III project team,
- the AGIRE III direct target group, which includes the Ministry of Equipment, Transport, Logistics and Water (METLE) and dependent organisations such as the regional water agencies (Agences de Bassin Hydraulique, ABHs),
- the AGIRE III indirect target group (inhabitants of the Tensift, Souss-Massa-Drâa and Oum Er-Rbia river basins; professional and managerial staff in other related sectoral ministries, regional and local authorities, universities and research institutes), and
- representatives of Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH who have an overarching function in AGIRE III.

The knowledge interests of the stakeholders (that is, the AGIRE III team, the GIZ planning officer, METLE and dependent organisations) can be grouped into two main areas:

- to assess AGIRE III's role and contribution to integrated water resources management and the traces it has left in the country, and
- to look ahead to follow-on projects, how to integrate experiences and lessons learned, and the sustainability of AGIRE III.

The project ended in June 2020. This was before the semi-remote evaluation mission took place from 14 to 25 September 2020. Not all project staff was still available for interviews. During the inception mission, it was hoped that the Covid-19 restrictions would be waived in September and the evaluation mission could take place as planned without the need for a semi-remote evaluation. This did not happen. The evaluation mission and the inception mission both had to be held semi-remotely.

1.2 Evaluation questions

The project was assessed on the basis of standardised evaluation criteria and questions to ensure comparability by GIZ. The questions were based on the Development Assistance Committee of the Organization for Economic Co-operation and Development (OECD/DAC) evaluation criteria for international cooperation and the evaluation criteria for German bilateral cooperation: relevance, efficiency, effectiveness, impact and sustainability. Aspects of coherence, complementarity and coordination were included in the other criteria.

Specific evaluation dimensions and analytical questions were derived from this framework by GIZ. These form the basis for all central project evaluations in GIZ and can be found in the evaluation matrix (Annex). In addition, contributions to the 2030 Agenda for Sustainable Development and its principles (universality, integrative approach, 'leave no one behind' and multi-stakeholder partnerships) were considered along with cross-cutting issues such as gender, the environment, conflict sensitivity and human rights. Aspects regarding the quality of implementation are included in all OECD/DAC criteria.

Three hypotheses at outcome level and two hypotheses at impact level and their alternatives served as a further basis for the evaluation.

2 Object of the evaluation

This chapter defines the evaluation object, reflects the results model of AGIRE III and summarises key results hypotheses. Information is also included on the current project status.

2.1 Definition of the evaluation object

The main object of evaluation was the technical cooperation measure Support to Integrated Water Resources Management (Appui à la Gestion Intégrée des Ressources en Eau, AGIRE), project number PN: 2016.2057.4, henceforth called 'the project'. The project ran from 1 January 2017 to 30 June 2020. The total project value was EUR 7,642,857.

The evaluation object can be described in detail as follows:

- **Temporal delineation:** the evaluation object was the current project (1 January 2017 to 30 June 2020). Predecessor projects, that is, AGIRE I (PN: 2006.2168.0) and AGIRE II (PN: 2010.2007.2), were considered in the context of assessing the OECD/DAC criterion 'sustainability' (see Section 4.6).
- **Financial delineation:** the evaluation object considered the budget of the current project (EUR 7,642,857). The original budget was EUR 6,142,857, of which the German Federal Ministry of Economic Cooperation and Development (BMZ) contributed EUR 5,000,000 and the Swiss Agency for Development and Cooperation (SDC) contributed EUR 1,142,857. An additional contribution (augmentation budget I) of EUR 1,000,000 by BMZ (30 October 2018) led to a change in module objective indicator (MOI); increased satellite-based monitoring of irrigation areas). Augmentation budget II of EUR 500,000 was dated 17 October 2019 but did not lead to changes in the module objective or indicators.
- **Geographical delineation:** the evaluation object was the Tensift, Souss-Massa-Drâa and Oum Er-Rbia river basins. The impact on Morocco as a whole was also assessed through the capacity development programme for professional and managerial staff in the relevant sectoral ministries, regional and local authorities, universities and research institutes.

The **system boundary** was defined by the targeted populations of the three basin agencies (Tensift, Souss-Massa-Drâa and Oum Er-Rbia; approximately 11 million inhabitants). Other local target groups, particularly women, benefit from innovative pilot projects in the fields of rainwater management and ecological wastewater management at pilot measure locations in rural and urban areas. Through the generalisation of participatory water management, which aims at equal, balanced planning and management of water resources, water users in other catchment areas of Morocco also benefit. Other stakeholders include professional and managerial staff from the relevant sectoral ministries, regional and local authorities, universities and research institutes and non-governmental organisations. At micro level, cooperation takes place with water users and municipalities.

Photo 1: Intervention area of the AGIRE III project (Source: El Meknassi, 2020)



The project focused on **integrated water resources management (IWRM)** and was divided into three fields of action:

- strengthening the institutional, legal and organisational framework,
- supporting participatory planning and management of water resources, and
- generalising (upscaling) the application of good IWRM practices and instruments, such as water management monitoring and evaluation systems, rainwater management and ecological wastewater management.

The broad impact at the level of IWRM improvement (reduction of water overuse, food security, poverty alleviation and active involvement of user groups) is influenced by external factors and therefore lies beyond the system boundary (see the results model in Section 2.2).

Morocco's water sector is characterised by dwindling groundwater and surface water resources, and a precipitation regime with strong temporal and spatial disparities. There are significant differences between the rainy north and the dry south. The average availability of renewable water resources is currently around 625 m³/capita/year. This will probably have dropped to about 564 m³/capita/year by 2030 and 511 m³/capita/year by 2050 (World Bank, 2020). These values are well below the generally accepted water stress threshold of 1,000 m³/capita/year and will reach the threshold of absolute water scarcity of 500 m³/capita/year.

The situation is already exacerbated by the negative effects of climate change. In many areas, regional water management agencies (ABHs) are struggling with acute water shortages and are increasingly unable to provide irrigation for agriculture. The project supports their efforts with Support for participatory water resources planning and management (Component B) and Upscaling the use of IWRM tools and good practices – water resources monitoring (Component C).

The national water management plan (**Plan National de l'Eau, PNE**), which is the reference document for national water policy, serves as a framework for water management. The PNE aims to promote the mobilisation of additional surface water and non-conventional water resources (seawater and wastewater reuse), which is supported by Strengthening the institutional, regulatory and organisational framework (Component A), Upscaling the use of IWRM tools and good practices – development and use of rainwater (Component D) and Upscaling the use of IWRM tools and good practices – good practices in ecological sanitation and wastewater reuse (Component E).

Morocco considers itself an Islamic constitutional monarchy. It has been ranked first in the democracy index of the Arab world since 2017 by the Arab Reform Initiative, which assesses democratisation processes in the countries of the Middle East and North Africa region after the Arab Spring revolutions (Brouwer and Bartels, 2014). Morocco has adopted a new constitution that recognises human rights. It provides for their protection and respect for their universality and indivisibility. The constitution grants the right to access water and a clean environment (Article 31).

The project considers a range of **cross-cutting issues** such as gender, the environment, climate change, conflict sensitivity and human rights. **Gender** aspects have been a focus since 2009 in the predecessor projects AGIRE I and AGIRE II, and then in AGIRE III. AGIRE III is classified as UR 2 in the OECD/DAC marker system, that is, as an **environmental project**. The project outcome is: Integrated water resources management (IWRM) considering the effects of climate change is improved. The project aligns all activities with protection of the environment.

The project emphasises adaptation to **climate change**. ABHs are empowered to draw up their water management plans considering climate change. Rainwater harvesting and treated wastewater are additional sources of water that can mitigate the future weather conditions that are expected from climate change. The guidelines for rainwater harvesting in an urban context suggest a variety of applications. Climate change is anchored in national legislation and the texts created for Component A all refer to a changing climate.

Access to water is a **human right**. The contributions of the project to IWRM help to secure this right. Participative governance of watersheds reinforces relations between the administration and the population.

Conflict sensitivity is another area in which the project is engaged, mainly in preventing future conflicts. This is achieved with an open, transparent framework for Support for participatory water resources planning and management (Component B).

The project focuses on different levels and could be considered an ideal case for a **multi-level approach**. The multi-level approach is also reflected in the **partner structure**. The Directorate of Water Planning and Research (Direction de la Recherche et de la Planification de l'Eau, DRPE) is the partner at national level and three ABHs are partners at intermediate level. The project's indirect target group is the population of Morocco, which had approximately 33 million inhabitants in 2015, and in particular the population of the catchment areas of Tensift, Souss-Massa-Drâa and Oum Er-Rbia (approximately 11 million inhabitants or about a third of the total Moroccan population).

2.2 Results model including hypotheses

The project's results model, which was developed in July 2016 (GIZ, 2016), has been modified slightly and is reflected in the following figure.

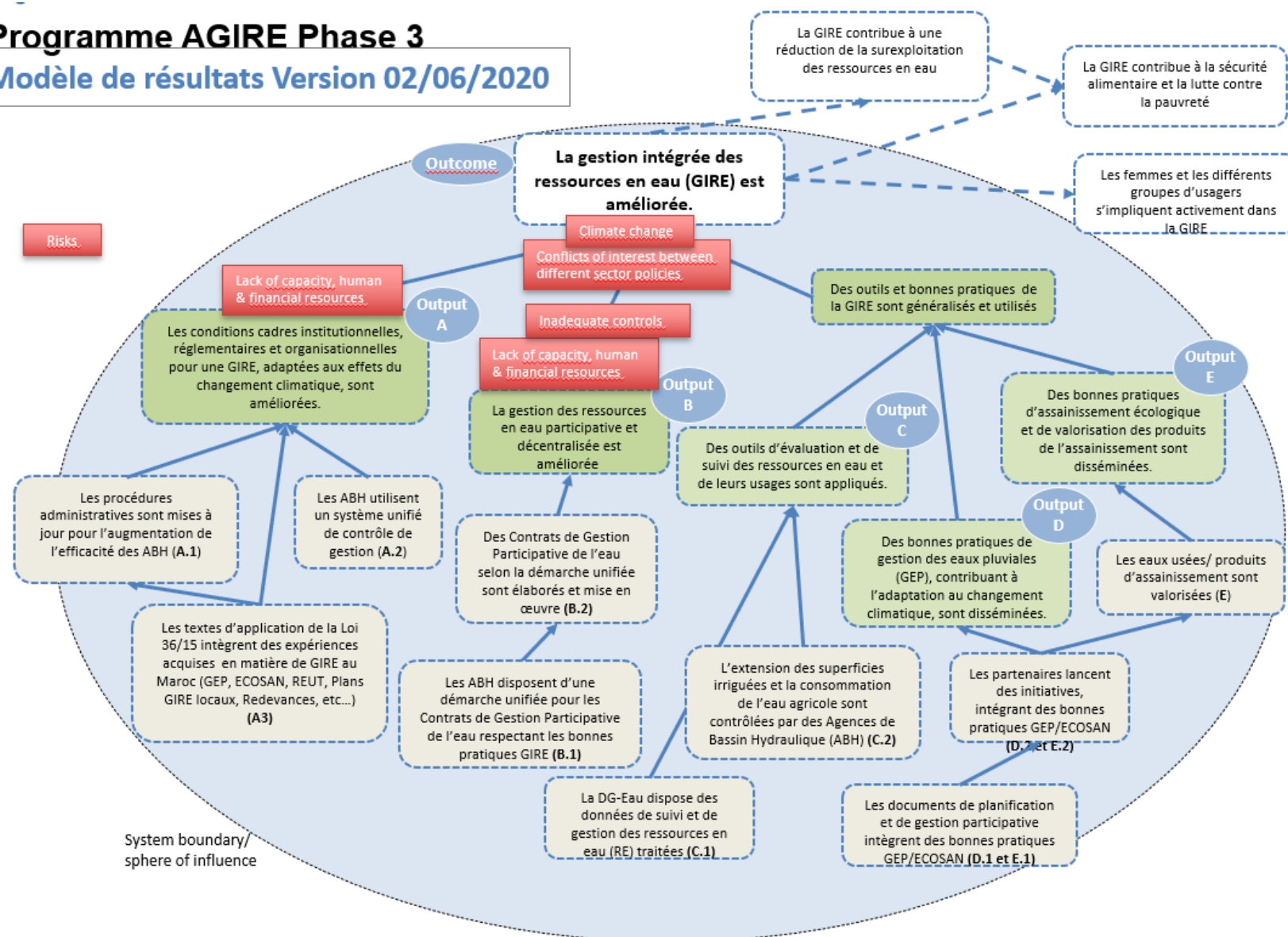
Photo 2: This oasis near Tiznit will become productive with reused wastewater (Source: El Meknassi, 2020)



Figure 1: Results_model

Programme AGIRE Phase 3

Modèle de résultats Version 02/06/2020



Key results hypotheses for the evaluation underlie the project design (and the results model). Three hypotheses have been developed with the project team at outcome level.

- Hypothesis 1: participatory management contracts involve users and better control water consumption, and thus contribute to improving integrated water resources management (B2, B1, Output B and MOI 2).
- Hypothesis 2: water resource assessment and monitoring tools provide better knowledge of the resource and its uses. Thus they contribute to improving integrated water resources management (C1, C2, Output C and MOI 3).
- Hypothesis 3: planning and management documents incorporate good practices in rainwater management and ecological sanitation (including wastewater reuse). These are used by stakeholders, and thus contribute to improving integrated water resources management (D1, D2, E1, E2, Output D, Output E and MOI 4 and 5).

Two hypotheses were developed at impact level.

- Increased integrated water resources management (outcome) is likely to contribute to a reduction in the overuse of water resources (Impact I1).
- Increased integrated water resources management (outcome) is likely to contribute to the active involvement of women and different user groups (Impact I3).

Integrated and sustainable management of water resources contributes in the medium and long term to economic growth and thus to improvement of living conditions, in particular for poor population groups in rural areas of Morocco (BMZ, 2015). The project contributes to the protection and sustainable use of water resources. It encourages cooperation between key actors, supports interdepartmental coordination and the participation of the population in measures and decisions in water management.

AGIRE's contribution to policies, strategies and the new water law will generalise the parts of the IWRM approach that are retained in texts and decrees once they have been applied by the Moroccan government and implemented by the administration.

For information on quantifying the hypotheses, see Section 4.3.

So far, the following potential unintended positive and negative results have been assessed:

- **Unintended positive result:** participatory water management contracts and the procedure to obtain them are known beyond the three partner ABHs and are now standard practice in the country. The AGIRE rainwater guidebooks are known and used throughout the country. Rainwater harvesting in the urban context is usually associated with GIZ.
- **Unintended negative result:** the use of treated wastewater for irrigation can substitute ground or surface water but it can also be used to extend irrigated areas.

External factors identified during project planning have been checked. They refer to the political and economic context and can be summarised as follows:

- **Conflicts of interest** between sectoral policies (e.g. agriculture, tourism, industry and drinking water supply). Water demand is increasing due to urbanisation and a rise in commercial agriculture resulting from national and foreign investment.
- **A lack of capacity and of human and financial resources** in DRPE and ABHs.
- **Inadequate controls and sanctions** on water abstraction and pollution of water resources.
- **The impact of climatic change** on water resources is already noticeable. The draft PNE estimates the water deficit in Morocco for 2030 with and without climate change. It calculates a water deficit increase of 75% due to climate change.

The results model and underlying hypotheses consider **interactions between social, economic and environmental results**. The intended impacts of the project already point to interactions between these dimensions:

- Impact I3 (Women and different user groups are actively involved in IWRM) is focused on the social dimension. It might be threatened if the livelihood of women and user groups drops considerably in the wake of the Covid-19 pandemic.
- Impact I2 (IWRM contributes to food security and poverty alleviation) has an economic and social dimension. The same threat as in Impact I3 applies.
- Impact I1 (IWRM contributes to a reduction in the overuse of water resources) targets the environmental dimension. Short-sighted economic considerations (increasing agricultural production with already limited water resources) might override environmental concerns.
- Output C has a clear economic dimension as basin organisations will have better, more effective, more economical means to monitor water resources continuously and in a timely way through the availability of processed data and satellite imagery. This is more economical and up-to-date than the previous consultancy contracts for land-based monitoring.

The **overall budget** was increased twice. The indicator of Component C was consequently increased. The budget increase was also needed to help achieve the indicator of Component E. It would provide material to improve a wastewater treatment plant, which would generate treated wastewater for agricultural purposes.

3 Evaluability and evaluation process

The evaluability of the project was given and was considered good. The following sections demonstrate the evaluability of the project by compiling information on the availability and quality of basic documents, baseline and monitoring data and interviews with the project team, direct and indirect target group and project stakeholders and their consideration in the context of the evaluation.

3.1 Evaluability: data availability and quality

A comprehensive list of documents was made available. No basic documents were missing. Documents were checked, consulted and found to be up-to-date and useful. Project progress reports, national strategies and sector or technical documents were of great use. Most documents were relevant for the OECD/DAC criteria of the evaluation.

The project used its own **monitoring system**, modelled on the GIZ impact monitor. The system is called the *fiche-suivi* (follow-up sheet) and is updated at least yearly or more frequently, depending on needs. There is a follow-up sheet for each component, containing the relevant outcome indicator, the output (component) indicators and milestones, and their development during the project period. The sheets provide the sources of verification of the indicators, details of work on the component, perspectives until the end of the project and questions that are relevant to the component, such as the sustainability of the output and associated risks. This system proved useful in the inception phase and the evaluation.

The project did not use KOMPASS as an observation tool.

All **indicators in the monitoring system are SMART** and in line with the results matrix. The data sources of each indicator (outcome and output level) are documented in the corresponding fact sheets. The data source (document management system link or short document description) can be used to deduce the **mode of information collection**, which was mainly based on reports.

The monitoring system was partly based on the DRPE monitoring/evaluation system. Monitoring of the indicators A and E was based on figures and data communicated by DRPE and partners. The partners' monitoring and evaluation system was also considered for other indicators (DRPE, 2018). DRPE and ABH data were discussed with the GIZ team and partners.

The project's results matrix shows that **baseline data** were collected for all indicators and integrated into the matrix. Baseline data for all indicators were 0 except for Monitoring of irrigated areas (MOI 3) and Recovery of wastewater/sanitation products (MOI 5), see DRPE, 2018. Baseline data were discussed with partners (DRPE and ABH). The resilience of data from national systems was not critically analysed but data were tested for plausibility.

General exchange of water data, for example, the exchange of data for monitoring Sustainable Development Goal (SDG) 6, is taking place in the donor harmonisation group (Groupe Thématique Eau). Data on SDG 6.5 are available on the IWRM data portal of the United Nations Environment Programme (wrmdataportal.unepdhi.org/countrydatabase). A baseline evaluation was carried out in 2017 and a follow-up evaluation round was launched by the United Nations Environment Programme in 2020. It was not ready at the time of this evaluation.

No monitoring and baseline data were excluded from the analysis but were used to assess the OECD/DAC criterion 'effectiveness'. Naturally, the main focus was **outcome level**. Indicator monitoring sheets were developed by the GIZ team to facilitate the final evaluation of the project.

3.2 Evaluation process

Due to travel restrictions because of the Covid-19 pandemic, the evaluation mission was carried out semi-remotely, as was the inception mission. The initial programme for the evaluation mission was revised to take this constraint into account.

The following table provides an overview of the **stakeholders involved in the project and their consideration in the context of the evaluation**.

Table 1: List of evaluation stakeholders and selected participants

Organisation/company/target group	Overall number of persons involved in evaluation (including gender disaggregation)	No. of interview participants	No. of focus group participants	No. of workshop participants	No. of survey participants
Donors	3 (2)	3			-
Kreditanstalt Für Wiederaufbau (KfW), Swiss Agency for Development and Cooperation (SDC), Enabel					
GIZ	6 (1)	6	0		-
GIZ project team/GIZ partner country staff					
Partner organisations (direct target)	16 (9)	2	14		-
DRPE, ABH Tensift, ABH Souss-Massa, ABH Oum Er-Rbia (by telephone)					

Other stakeholders	13 (5)	11	2		
Ministry of Agriculture, Office Régional De Mise En Valeur Agricole Du Haouz (ORMVAH), Office National du Conseil Agricole, Ministry of the Interior, Wilaya Marrakesh, Ministry of Urban Planning, Centre Royal de Télédetection Spatiale					
Civil society and private actors	3 (1)	3			-
Associations d'Usagers des Eaux Agricoles (AUEA) Marrakech, Association France et Maroc au Cœur (AFEMAC), AUEA Tiznit wastewater treatment plant					
Universities and think tanks	1 (0)	1	-		-
Institut Agronomique et Vétérinaire Hassan II					
Final beneficiaries (indirect target groups)					
Farmers near Marrakech (Component B)	4 (0)		4	-	-
Farmers in Tiznit (Component E)	2 (0)	-	2	-	-

Stakeholders participated in qualitative and semi-structured bilateral interviews (with the direct target group, donors, other stakeholders, civil society, universities and GIZ representatives) and focus group discussions (with the direct target group, indirect target group and project team members). The direct target group was selected according to functions essential to the project. It included division and service heads of four ministries and subordinate authorities, secretary generals and directors. The interaction of economic, environment and social dimensions was considered in this selection. The indirect target group was selected considering key intervention areas of the project. It included farmers and representatives of a wastewater plant, who were interviewed as focus groups. The face-to-face interviews with the stakeholders listed above generally went well. Stakeholders were interviewed or participated in focus group

discussions and/or workshops to assess the project's level of compliance with the OECD-DAC criteria. The interviews were based on questions derived from the evaluation matrix and adapted to the category of interview partners. Most of the selected interview partners and their perspectives on the essential categories could be included in the process, as expected. In some categories, interview turnout was lower than anticipated, for example with stakeholders like non-governmental organisations, the private sector, research institutes and think tanks. As a consequence, there was limited scope for analysing possibilities of triangulation, in particular to contextualise the results (Impact criterion, dimension 2: Project's contribution to the intended impact). The time allowed for the interviews was restricted by general Covid-19 precautionary measures in September 2020 in Morocco. In many cases it was not sufficient to collect all the necessary answers to the questionnaires or go

Photo 3: Interview with members of AFEMAC (Source: *EI Meknassi, 2020*)



into more detail. This was true for interviews outside the GIZ team and partners very close to the project. It was difficult to involve women during the field visits because:

- female farmers do not generally want to mix with men, and
- after the lockdown period, people's movements were limited to the strictly necessary and this did not facilitate the meeting of women in agricultural fields.

However, the president of the Association France et Maroc au Cœur (AFEMAC) farmer's association was a woman.

An intensive, very valuable debriefing session was held at the end of the evaluation period with the GIZ team and main partners (DRPE and two ABHs). It helped to triangulate the results and clarify some of the evaluation team's pending questions. The discussion centred on the assessment of the indicators and critical issues like key hypotheses, their alternatives and success and blocking factors in the project.

The project team will organise the transfer of evaluation results to partners (direct target group) after the evaluation mission. The partners requested a discussion session on the evaluation report of at least one full day.

The semi-remote nature of the evaluation was considered. The roles of the international and national evaluators were divided. The national evaluator acted on-site and was responsible for preparing (including logistics) and carrying out field visits, and for undertaking the corresponding qualitative and semi-structured interviews with the direct target group, focus group discussions with the indirect target group, and qualitative and semi-structured interviews with representatives of other stakeholders, civil society and universities. She did so in close cooperation with the project team (for example, in relation to logistics and the organisation of visits and meetings) and was supported by the international evaluator in the preparation of the methodology. Apart from being responsible for conducting the interviews and focus group discussions with the above groups, she also conducted interviews with project staff to assess project progress and achievement of results. Furthermore, she gathered important information with regard to the local context and its specifics. During the evaluation period and report writing, daily discussions were held via Skype between the national and the international evaluator to analyse the interviews and triangulate the results or find gaps where more information was required. This resulted in additional interviews after the evaluation period. The national evaluator supported and provided input on the analysis of collected data by the international expert and on reporting.

The international evaluator assumed overall responsibility for the evaluation. He was responsible for quality assurance and consideration of all methodological requirements of the GIZ Evaluation Unit. The contribution analysis (OECD/DAC criteria 'effectiveness' and 'impact') and the application of the follow-the-money approach (OECD/DAC criterion 'efficiency') were a particular focus. He supported the preparation of the evaluation mission in terms of methodology and backed the national evaluator. Furthermore, the international evaluator helped to plan and participated in the evaluation mission's briefing and debriefing meetings. He attended selected meetings with the GIZ project manager and team and conducted interviews with donor representatives to triangulate findings. These meetings were organised via Skype or TEAMS.

4 Assessment of the project according to OECD/DAC criteria

4.1 Long-term results of predecessors

Key aspects of the evaluation dimensions referring to impact (contribution aspect) and sustainability (anchorage in the partner system and durability) were the basis for evaluating the long-term results of predecessor projects. AGIRE I and II contributed to improving the legal and institutional conditions for reforming the water sector. The aim was to bring about integrated, economically efficient, socially just and ecologically sustainable management of water resources and ensure supply for sustainable development of the population in the programme regions, with drinking water that meets hygiene standards and the provision of appropriate wastewater management.

The evaluation design followed the standardised guiding analysis questions contained in the evaluation matrix. In addition, changes to the project design in the previous phases were examined. The long-term results of the predecessor projects were assessed using a mix of empirical methods.

AGIRE I and II followed quite a similar approach (related interventions at ministry, ABH and local level) and had an almost identical objective to AGIRE III. To a large extent, the long-term results (impact) could be captured by evaluating the respective interventions of the current project.

Assessment dimension: the difference in the focuses of the two predecessor projects and AGIRE III were emphasised to assess impact and sustainability. Here, the change in framework conditions and their effects were important. In addition, lessons learnt from predecessor projects were analysed in terms of their consideration in AGIRE III.

Predecessor projects (AGIRE I and AGIRE II) operated under the same German development cooperation conditions as the current project (AGIRE III) and intervened at national, regional and local level. Key findings on the assessment dimensions underlying the evaluation are given below.

The nature of the project changed over the ten-year period. The three AGIRE projects have become the competent body for IWRM. This is reflected in the willingness of Swiss and Belgian cooperation to cofinance programme activities. The 2015 BMZ country strategy (*Laenderstrategie*) for Morocco is based on the recommendations of the AGIRE programme (GIZ, 2016). As shown in the table below, the common point between the three projects was the decentralisation of water management in Morocco. The three projects had the same overall focus.

Table 2: Comparison of AGIRE I, II and III

AGIRE I	AGIRE II	AGIRE III
<ul style="list-style-type: none"> • Component 1: Improving the institutional, regulatory and organisational framework • Component 2: Technical capacity building • Component 3: Improving communication, information management and consultation between stakeholders 	<ul style="list-style-type: none"> • Component 1: Modernisation of MDCEau, (Ministère Délégué Chargé de l'Eau) and ABH • Component 2: Water resources control and monitoring systems • Component 3: Stormwater management • Component 4: Wastewater recovery • Component 5: Regional and local IWRM plans 	<ul style="list-style-type: none"> • Component 1: Strengthening the institutional, regulatory and organisational framework • Component 2: Support for planning and participatory management of water resources • Component 3: Generalisation (upscaling) of the use of IWRM tools and good practices • Component 4: Dissemination of good rainwater management practices • Component 5: Dissemination of good practices for ecological sanitation and the recovery of sanitation products

The three AGIRE projects were mainly active geographically in the capital Rabat and the water basins of Tensift, Souss-Massa-Drâa and Oum Er-Rbia in the centre and south of the country. To enable partner institutions to implement integrated water resources management, the project focused on capacity development (individual and organisational) at national (ministries), regional (water management offices) and local level (municipalities and water user groups). This was referred to as the multi-level approach.

In the first phases of the AGIRE project (AGIRE I), the focus was on information management in ABHs, ecological sanitation demonstration projects and communication. In the last phase (AGIRE III), the objective was capitalisation and spreading the results of the previous phases, so there was less budget for physical projects. It was hard to convince the partners of this change in project implementation (Partner_8).

For AGIRE III, the most **important results of predecessor projects** were:

- A stable partner structure, demonstration of good practices and a good working relationship with farmers, the Office Régional De Mise En Valeur Agricole (ORMVA) and ABHs. As a result, the project could be involved in participative water management contracts (Other stakeholders_2, 10).
- Over the ten-year period of the three projects, the framework conditions varied due to major institutional changes. The ministry responsible for water resources was reorganised from a state secretariat to a directorate attached to the ministry. However, ABHs remained stable. The AGIRE III project and the predecessor projects (AGIRE I and II) assisted in institutional strengthening of the water sector and supported institutional reform in this sector.
- The one-stop character of financial and technical interventions can be seen as a success factor of the project design and approach followed in Morocco. Visibility and acceptance were achieved at the level of target groups and the donor community. Investment in pilot projects (ecological sanitation, rainwater harvesting and wastewater reuse) demonstrated significant improvement of IWRM. In addition, capacity building and training helped to build a trustful relationship with targeted beneficiary institutions (such as ABH and ORMVA).

The implementation strategy of AGIRE III was based on long-term experience with predecessor projects AGIRE I and II and long-standing cooperation with partners.

4.2 Relevance

Evaluation basis and design for assessing relevance

The four dimensions described in the evaluation matrix were the basis for assessing relevance. They were the alignment of the project with relevant strategies and frameworks in the sector and region (dimension 1), matching of the project design with the needs of the target group at outcome and impact level (target group analysis, dimension 2), the adequacy of the project design at output level with regard to set results (dimension 3), and the adaptation of the project design according to changes (dimension 4).

The **evaluation design** followed the standardised guiding analysis questions in the evaluation matrix.

Relevance was assessed using a mix of empirical methods, namely qualitative and semi-structured interviews (direct target group and project team) and focus group discussions (indirect target group). Triangulation was achieved by carrying out qualitative and semi-structured interviews with selected donors, other stakeholders (Ministry of Agriculture, ORMVA Haouz, the Office National du Conseil Agricole, Ministry of the Interior, Wilaya Marrakesh, Ministry of Urban Planning, Centre Royal de Télédetection Spatiale), civil society and universities. The project team worked with the evaluation team to select donors, other stakeholders, civil society and universities to guarantee that they were aware of project activities and thus able to assess their relevance. Representatives of the direct target group were selected according to their involvement in project components at the level of DRPE and each ABH, to ensure the comparability of results. The representatives included division or service heads of public domain management, water planning and management, water quality and

the GIZ focal point. Representatives of the indirect target group were selected due to their involvement in the project at different levels and because they can provide different perspectives on the components of the project in which they were involved.

Representatives were selected in coordination with DRPE and ABHs and considering a balance between results orientation (e.g. new initiatives disseminating good rainwater harvest practices, farmers benefiting from reused wastewater) and process orientation (e.g. gender mainstreaming) of project activities. To receive a neutral or critical view of the results and impact of the project, additional interviews were conducted at the request of the evaluators with other people involved in the project (e.g. Partners_1, 6, 8). Naturally, willingness to be interviewed was respected.

Analysis and assessment of relevance

The analysis and assessment of relevance were structured according to the set of assessment dimensions.

Relevance dimension 1: Alignment with strategic reference frameworks

Relevance dimension 1 enabled the evaluation team to assess whether the project's objective and design were consistent with global priorities and partner and donor policies. The evaluation team analysed the strategic reference framework, in light of the BMZ Water Strategy. Furthermore, the project's contribution to the Agenda 2030 (SDGs) was assessed. Key findings on the project's alignment with relevant strategies and frameworks in the sector and region are given below.

- **Water Law 36–15** (Official Bulletin no. 6506 of 6 October 2016) pursues the objectives of Law 10–95. It stipulates the rules for integrated, decentralised, participatory water resources management, with a view to guaranteeing the right to access water. This new law introduced reforms aimed primarily at consolidating and strengthening decentralised, integrated, participatory management and planning of water resources. It includes the use and exploitation of the public water domain, the development and use of rainwater, the valuation and use of unconventional water sources, the administration of water, water planning and water conservation, among other factors. It aims to put in place planning rules and tools for wastewater, drinking water, seawater and other areas to increase the country's water potential, considering adaptations to climate change.
→ The AGIRE II project participated in the development of this law. AGIRE III contributed to the preparation of the decrees.
- **The national water strategy** (Stratégie Nationale de l'Eau, 2009) was launched in 2009. Along with the PNE, the aim is to achieve more efficient, demand-driven use of water resources, especially surface waters, and benefit highly endangered aquifers. The strategy focuses on the role of complementary water management actions to address water problems and achieve coordinated management of supply and demand, while ensuring equitable distribution between rural and urban areas.
→ The AGIRE I project participated in the promotion of working groups to implement national water strategy action plans.
- **The national water management plan** (DRPE, 2015) is the reference document for national water policy and serves as a framework for water management. The previous plan was prepared in 2015 in consultation with all stakeholders in the water sector. It was updated in 2019 but remains confidential (GIZ) as it has not yet been officially adopted.
→ AGIRE II and III projects participated in the preparation of the 2015 and 2019 PNE by carrying out strategic studies of the water sector and introducing approaches for preparing planning documents (DRPE, 2019).
- **The national priority programme** to supply drinking water and irrigation 2020–2027 (DRPE, 2018) was adopted by the government of Morocco with an investment of Euro 11 billion. Its objectives include:
 - increasing water supply by building new dams,
 - improving management of water demand and water valuation, particularly in agriculture,
 - enhancing the supply of drinking water in rural areas,
 - using recycled wastewater for irrigation of green spaces, and
 - sensitising and heightening awareness of the importance of preserving water resources and rationalising water use.
 → This programme is consistent with the concepts and objectives of the AGIRE project.
- **The national wastewater reuse plan** (DRPE, 2015) aims to eradicate uncontrolled use of wastewater by 2020 and its direct or indirect reuse. It promotes treated water reuse through the valuation of usable water potential, which is estimated as 325 million m³/year by 2030.
→ AGIRE II led the consultation workshops prior to the implementation of this plan (DRPE, 2014).
- **The mutualised national sanitation plan** (Programme National d'Assainissement Mutualisé, PNAM) was launched in June 2018 (DRPE, 2014). It aims to establish a consolidated and integrated programme, considering urban sanitation, rural sanitation and wastewater reuse.
→ AGIRE supports this programme through the production of guides and pilot projects for rural sanitation.
- **The national strategy for equality and gender equality** by mainstreaming the gender approach in development policies and programmes (GIZ, 2016) was presented by the Moroccan government in 2007. The concerns of women and men are to be integrated into the conception, implementation, control and evaluation of government programmes so that both sexes benefit equally, and current inequalities will not persist.
→ AGIRE and especially AGIRE III has contributed to the integration of women in the related decrees.

- **National sustainable development strategy** (Ministère de l'Energie et des Mines et de l'Environnement, 2017). Morocco has signed and ratified the main international and regional conventions in connection with the environment and sustainable development. The national sustainable development strategy is in line with international good practices and takes up the sustainable development challenges to which the country is committed. These include tackling climate change, the fight against desertification and the protection of biodiversity.
→ The concept of the AGIRE III project is consistent with this strategy.
- **The green Morocco plan** aims to contribute to Morocco's gross domestic product with MAD 174 billion, creating 1.15 million jobs by 2020 and tripling the income of nearly three million people in rural areas.
→ The AGIRE project aims to ensure food security and therefore conforms to the green Morocco plan.
- The study on the development of a concerted and shared SDG 6 monitoring system carried out by GIZ (2019) drew up an inventory of the indicators available for monitoring SDG 6.

German development cooperation was closely coordinated with other donors in the areas of drinking water supply, wastewater management, irrigation, IWRM and climate adaptation with other donors:

- the Kreditanstalt Für Wiederaufbau (KfW) in the framework of the IWRW Tensift module,
- the BMZ Middle East and North Africa special initiative technical cooperation project Promoting Employment in Rural Wastewater Management and Sanitation (CESAR, PN 2015.4100.2), and
- the technical cooperation project Adaptation to Climate Change/Implementation of the Nagoya Protocol (ACCN, PN 2012.2169.6), which provides an opportunity to exchange experiences on good climate-related practices for managing rainwater and ecological wastewater.

The project design considered the achievements and good practices of AGIRE I and II and partner requests. The project indicators, outputs and activities were developed in planning workshops and approved by BMZ. Interactions in terms of synergies or trade-offs with other sectors are reflected in the project design. There was synergy between Bundesanstalt für Geowissenschaften und Rohstoffe – The Federal Institute for Geosciences and Natural Resources (BGR), Kreditanstalt für Wiederaufbau (KfW), Enabel and the project coordinated by ABH Souss-Massa, which carried out remote sensing work and monitoring of evapotranspiration in the Souss-Massa basin (GIZ).

The presence of a GIZ legal adviser helped to advance the implementing texts and contributed to the introduction of new concepts such as gender, desalination and ecological sanitation (Partner_11).

At national level, the project was planned and managed jointly with the partner institutions (GIZ, 2018), which ensured effective implementation of the agreed activities. The project addresses central levers for implementing the Moroccan integrated water resources management strategy (Other stakeholders_17).

Thus, the project was fully in line with the relevant strategic reference frameworks. The project was integrated into the national water strategy. Relevance dimension 1 – Alignment with strategic reference framework – scores **30 out of 30 points.**)

Relevance dimension 2: The project design matches the needs of the target groups at outcome and impact level

In this dimension, the evaluation team assessed whether the project design matched the needs of the target groups. During the evaluation mission, visits to rainwater harvesting projects (Douar Hamri) and the future irrigation perimeter attached to the Tiznit wastewater treatment plant clearly showed the urgent water needs of smallholder farmers and poorer and vulnerable sections of the population, due to increasing scarcity or even lack of access to water resources.

According to the project proposal, the target groups' needs will be satisfied by IWRM measures like participative management contracts and wastewater reuse. To anchor these measures, the project focused on the development of individual and organisational capacities for professional and managerial staff in the relevant sectoral ministries, regional and local authorities, universities and research institutes. Other local target groups, particularly women, were to benefit from innovative pilot projects on rainwater management and ecological wastewater management at locations in rural and urban areas.

The evaluation team compared the target group needs described in the project proposal with those of the actual target groups to determine the extent to which the project design addressed these needs. The project proposal defined the direct target groups as DRPE and ABH Tensift, Oum Er-Rbia and Souss-Massa. The indirect target groups were the population of the watersheds of the Souss-Massa, Drâa, Oum Er-Rbia and Tensift regions, other stakeholders like the staff of project implementing agencies and intermediary organisations.

The evaluators compared the project documents with evidence from interviews.

Table 3: Matching the project design with evidence from the target group

Project documents	Evidence from interviews, observations during the evaluation mission
<p>The project design (GIZ, 2018) was based on a diagnosis of variability in water resources. Water variability mainly affects the poorest segments of the population in rural areas whose water supply may be interrupted when there is a lack of rainfall and/or a reduction in surface and groundwater resources.</p>	<ul style="list-style-type: none"> • The AGIRE III project improved the positioning of ABHs in IWRM through the production of good practice guides, knowledge transfer and improvement of water resource monitoring skills (Partners_5, 6, 7). • The project approach was aimed at saving water but not to the detriment of farmers, so the objective was to reduce overexploitation and achieve more equitable exploitation (GIZ, Other stakeholders_2, 10). • The project provided approaches to address the limitation of ABH's organisational capacity in terms of active presence in the field, and addressed the retirement problem and transmission of knowledge to young employees (GIZ).
<p>The project addressed a number of issues to promote women's equal rights and their strategic and practical interests. In particular, it focused on women's participation and thus the representation of their interests in agreements on participatory water management (GIZ, 2018). In addition, a contribution was made to reducing the burden on women and girls due to inadequate sanitation and improving equal opportunities by promoting sustainable sanitation measures.</p>	<p>The project promoted the integration of women in water consultation committees. A quota was included in the decrees of basin councils, the Superior Council for Water and Climate, and prefectural and provincial water commissions (Partner_11). In the framework of pilot projects with rural women, women's access to training courses was facilitated by creating a quota and adapted schedules (Other stakeholders_12). Pilot ecological sanitation projects improved girls' access to schools and quality of life (Partner_12).</p> <p>The evaluation mission noted the project's efforts to strengthen the capacity of rural women by facilitating their access to training (e.g. through adapted schedules for the agroecology project in Douar Hamri). The mission also noted the increase in the number of women managers at the level of the ministry in charge of water and basin agencies in recent years (Partner_11).</p>
<p>The project helped the poorest, mostly in rural areas, to represent their interests in improving access to water. This enhanced the situation of small-scale agriculture, contributed to food security and economic development and therefore to the reduction of poverty (GIZ, 2015).</p>	<p>Through the decree of participative management contracts (Component B), the project design implemented at ABH Tensift introduced a unified approach to the whole country (Partner_5, 6, 7). The evaluation mission considered that the project focused on small farmers as it helped associations of agricultural water users to adhere to participatory groundwater management contracts and promoted treated wastewater in agriculture.</p>

<p>The project adopted the 'leave no one behind' principle. The project design considered that poorer populations should benefit most from improving access to water resources and wastewater management. In addition, other urban and rural population groups should benefit directly from innovative pilot projects on rainwater management and wastewater recycling (Programme proposal, Part B, Integrated water resources management in Morocco, Pn: 2010.2007.2).</p>	<ul style="list-style-type: none"> • The project set up pilot projects on rationalisation of water use in buildings, rainwater harvesting, agroecology and ecological sanitation. The pilot projects led to adoption of practices by institutional partners, in particular ABHs and regional planning departments, dissemination through good practice guides and integration into planning documents or decrees. This approach ensured that the actions had a widespread impact (GIZ, Partners_4, 6, 7, 8, 9, 10 and 11, Other stakeholders_1, 2, 3, 7, 10). • The AGIRE III project enabled Associations d'Usagers des Eaux Agricoles (AUEAs) to express themselves on the state of irrigation networks and problems related to the institutional framework. The consultation workshops were an opportunity to collect ideas on the problems (Other stakeholders_1). The approach was to improve cooperation and coordination between the institution and end users. After the training sessions, exchanges with the AUEAs and the administration were improved (Other stakeholders_10). • Pilot projects visited by the evaluation mission involved people with very low incomes who were beneficiaries of project activities (Other stakeholders_11, 12).
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Relevance of pilot measures for beneficiary communities: based on findings and observations during the field survey, the community groups that were supported showed their knowledge of the AGIRE III project and the importance of the support they received. In the Marrakech and Tiznit regions, all farmers highlighted the benefits to them. They mentioned the capacity building and knowledge gained through training sessions organised within the framework of AGIRE III. The training sessions on participatory management were considered an innovation by the stakeholders (Partners_5, 6, 7; Other stakeholders_1, 2, 7, 10, 11) and by the final beneficiaries (Other stakeholders_12, 13). The beneficiaries appreciated the project's achievements (such as rainwater harvesting and a filtration station for treated wastewater) and noted that the project procedures were more flexible and faster than the public administrative procedure (Other stakeholders_12). Valuable international experiences in water stewardship (with the CEO Water Mandate) and GIZ experiences (with the International Water Stewardship Programme) were discussed but only partly implemented. They could have helped to increase the involvement of big agricultural players in water resources management (MOI 2).

The project fully matched the needs of the target groups (scores **29 out of 30 points**).

Relevance dimension 3: The project was adequately designed to achieve the chosen objectives

The project's theory of change was assessed by analysing the results model and key hypotheses (see Section 2.2). The assessment showed that the hypotheses were plausible. The results model was based on findings of the evaluation and appraisal mission for the predecessor project and was updated by the project team. It mapped the entire spectrum required (activities, outputs, outcome and impact). Not all the results were explicitly focused on the target group. However, the formulation clearly referred to the populations of the three basins and to vulnerable groups. As previously stated, the system boundaries were clearly defined (see Section 2.2), and the risks were well presented (see Section 3.2). Assumptions were made at the level of the results matrix. The specific assumptions underlying the results model consider all target groups.

To achieve the project objective, the agreed activities and instruments were planned and managed jointly with the partner institutions, which ensured effective implementation. The project addressed the central levers for implementing the Moroccan integrated water resources management strategy. The design considered the

achievements and good practices of the AGIRE I and II projects (GIZ, 2016). The indicators, outputs and activities were developed in the planning workshops and approved by BMZ. Two committees were set up (GIZ, 2019) and met once a year: a strategic steering committee with the participation of the resident director of GIZ and representatives of Swiss cooperation, and an operational steering committee with members from DRPE, the focal points of ABHs and the AGIRE project team.

Partner requests were considered if they fit the project framework. However, the partners would have appreciated more involvement in GIZ team planning sessions (Partner_8).

The project objective helped to achieve the German cooperation objective for the sector.

The project objective was realistic from today's perspective and considering the given resources.

- **Time:** almost all the project objectives and outputs were achieved in time; no extension was necessary (see Section 4.3 Effectiveness).
- **Finances:** the project was sufficiently equipped financially to reach the outcome (see Section 4.5 Efficiency).
- **Partner capacities:** the project invested sufficient resources in capacity development of partner institutions. Partners were partly overwhelmed by the many tasks within the project. A temporary lack of adequate personnel at partner institutions was mentioned (Partner_6, GIZ).

The project was the continuation of the AGIRE I and II programmes, which were well received and appreciated by the Moroccan partners and were highly valued.

Considering the multi-level focus, the project was adequately designed to achieve the chosen objectives (scores **18 out of 20 points**).

Relevance dimension 4: The project design was adapted to changes in line with requirements and readapted where applicable

The history of adaptations and extensions of the programme, budget increases (2018 and 2019) and budget increases due to cofinancing by SDC (2017) served as a framework for the evaluation of dimension 4. The table below explains the history of changes and their impact on conceptual change and indicators.

Table 4: Budget changes (GIZ)

		Date	Sum (change)	Total project budget	Conceptual change/indicators
AGIRE III	AGIRE III project	17 October 2016	5,000,000	5,000,000	Not applicable
AGIRE III	SDC cofinancing	13 April 2017	1,142,857	6,142,857	<ul style="list-style-type: none"> • Two new participatory water management contracts were developed (Indicator B.2 was changed from three participatory management contracts to five participatory management contracts). • Participatory management contracts were implemented for 400,000 inhabitants (the module indicator of Component B was increased by 400,000 inhabitants). • Wastewater/sanitation products were recovered for 100,000 additional inhabitants (from 200,000 to 300,000).
AGIRE III	Budget increase I	30 October 2018	1,000,000	7,142,857	<ul style="list-style-type: none"> • The module indicator of Component C was modified (22,800 km²/5.5 million inhabitant 28,000 km²/6.4 million inhabitants). • To facilitate achievement of the module indicator of Component E (300,000 inhabitants), equipment was purchased to make the Tiznit reuse project effective.

AGIRE III	Budget increase II	17 October 2019	500,000	7,642,857	Not applicable
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Thus, the project seized the opportunity to scale up its interventions horizontally. The results model and the results matrix were adapted accordingly.

Concerning the general framework, there has been a global shift from rather national labels to SDGs. The project was aligned in its design stage with the sub-objectives of SDG 6.3 (water quality, wastewater reuse) and 6.5 (IWRM), which represent the fundamental elements of IWRM in the SDGs. SDC cofinancing underlined this orientation towards SDGs, by increasing participatory water management contracts (SDG 6.5) and wastewater reuse (SDG 6.3).

BMZ changed its strategy between 2006 and 2016 to focus more on the interactions between water and other sectors (such as water and agriculture, and water and energy). This was reflected in the first budget increase, made to obtain more efficient tools for water use in agricultural areas by satellite images and their analysis, and to provide additional water through wastewater reuse.

At the level of Morocco, the issues of water and climate change are becoming more visible. The Moroccan government has responded by making METLE more important than the former secretariat that was responsible for water. This can be confirmed through METLE's achievements. The predecessor project AGIRE II made a strong contribution (METLE, 2019; loi n° 36–15 relative à l'eau). AGIRE III carried these contributions forward and emphasised climate change, its consequences and possible adaptations (e.g. water management contracts and wastewater reuse).

In this regard, the project design was fully adapted to changes in line with requirements (scores **20 out of 20 points**).

Considering the four dimensions, the overall score for relevance was 97 points (highly successful).

Table 5: Rating of OECD/DAC criterion: relevance

Criterion	Assessment dimension	Score and rating
Relevance	Alignment with strategic reference frameworks	30 out of 30 points
	Matches the needs of the target group(s)	29 out of 30 points
	Adequately designed to achieve the chosen objectives	18 out of 20 points
	Adapted to changes in line with requirements and readapted where applicable	20 out of 20 points
Relevance total score and rating		Score: 97 out of 100 points Rating: Level 1: highly successful

4.3 Effectiveness

The evaluation basis for assessing effectiveness was the MOIs shown in Table 5 below (dimension 1) and selected results hypotheses and alternative hypotheses (dimension 2). Semi-structured interviews and focus group discussions were key reference points for assessing additional unintended positive and negative results (dimension 3).

The evaluation design followed the standardised guiding analysis questions in the evaluation matrix, and applied the minimum standard required (contribution analysis). Following the steps of the contribution analysis, selected results hypotheses and alternative hypotheses were tested and verified based on the evaluation findings. The selected results (alternative) hypotheses considered the particular knowledge interest of the stakeholders involved in the evaluation to ensure the use of the evaluation findings. A combined approach of theory-based aspects (MOIs) and hypothesis-based aspects was followed. Data on unintended results were explored in the context of selected semi-structured interviews with the direct target group and focus group discussions with the indirect target group. For triangulation purposes, data were cross-checked in the semi-structured interviews with the representatives of selected donors.

Effectiveness was assessed using the same mix of empirical methods described in the section on assessing relevance. The same applies to the methodology for analysing the documents. First, a theory-based qualitative data analysis (MOIs and output indicators) was conducted. Findings were cross-checked by analysing the project's contributions to selected result hypotheses in semi-structured interviews and focus group discussions. In addition, means of verification and additional partner documents were assessed. The reliability of the evidence was rated as good.

Analysis and assessment of effectiveness

The analysis and assessment of effectiveness were structured according to the set of assessment dimensions. One important basis for assessing effectiveness was the project's own monitoring tool. However, it was only updated once a year, which did not provide a good overview of implementation over time. Documentation on internal meetings and discussions was not made available. Such documents would have helped the evaluation team to track how decisions were taken or how critical issues were discussed.

Effectiveness dimension 1: Achievement of the (intended) objectives

The achievement of the project objectives was assessed based on the MOIs included in Table 5. All MOIs were formulated according to SMART criteria. They were not adapted by the evaluation team. The formulation of the outcome (module objective) was specific.

Key findings on the achievement of the objective (outcome) on time in accordance with the aforementioned indicators are given below.

Table 6: Overview of the assessed MOIs and their achievement

Module objective (outcome)	MOI	Achievement
Integrated water resources management in Morocco has improved, considering the impact of climate change.	MOI 1: five decrees of the new Water Law 36–15 that consider climate change for the implementation of IWRM have been submitted for approval. Two of these contribute to gender equality. Base value: 0 Target value: 5, of which 2 contribute to gender equality	<ul style="list-style-type: none"> Decree of the regional water agencies (Décret Agences de Bassin Hydraulique) Basin council decrees (Décret Conseils de Bassin) Decree of the Superior Council for Water and Climate (Décret Conseil Supérieur de l'Eau et du Climat, CSEC) Water planning process decree (Décret Processus de Planification de l'Eau) Prefectural and provincial water commissions. <p>Indicator achieved. Decrees no. 2, 3 and 5 have a quota of women.</p>
	MOI 2: in the Tensift, Souss-Massa-Drâa and Oum Er-Rbia basins, participative water management contracts are being implemented that benefit 3.2 million inhabitants.	<ul style="list-style-type: none"> Haouz-Mejjate (2.9 million inhabitants) Chtouka (0.3 million inhabitants). <p>Indicator achieved.</p>

	<p>Base value: 0 (no contracts have been implemented yet)</p> <p>Target value: contracts are being implemented for 3.2 million inhabitants</p>	
	<p>MOI 3: ABHs use satellite data to monitor the extension of irrigated areas and the consumption of agricultural water for an area of 28,000 km² with 6.4 million inhabitants.</p> <p>Base value: monitoring of an area of 6,400 km² with 1.7 million inhabitants</p> <p>Target value: monitoring of an area of 28,000 km² with 6.4 million inhabitants</p>	<ul style="list-style-type: none"> Monitoring evapotranspiration in the three partner catchment areas (Tensift, Oum Er-Rbia and Souss-Massa) with a total surface area of 102,870 km² Detailed land use maps for the agricultural plains Souss-Massa, Haouz-Mejjate, Tadla and Bahira (26,559 km²/6.4 million inhabitants). <p>Indicator achieved.</p>
	<p>MOI 4: ten national multipliers have launched initiatives incorporating good rainwater management practices.</p> <p>Baseline value: 0, a catalogue of good practices exists but it has not yet been implemented through third party initiatives.</p> <p>Target value: 10</p>	<ul style="list-style-type: none"> MusEau AIOMrane Département de l'Eau (DE) AFEMAC Association Dar Si Hmad Hassania School of Public Works (Ecole Hassania de Travaux Publiques) National School of Architecture in Marrakech (Ecole Nationale d'Architecture de Marrakech) Faculté des Sciences et Techniques Al Hoceima (FSTH) Direction de l'Aménagement du Territoire Direction de la Politique de la Ville ABH Tensift. <p>Indicator overachieved (11 national multipliers).</p>
	<p>MOI 5: the wastewater/sanitation products of 300,000 inhabitants are recovered.</p> <p>Basic value: 2,000 inhabitants (current pilot projects)</p> <p>Target value: 300,000 inhabitants</p>	<p>88,000 (Tiznit), 2,000 (pilot projects) and 191,000 without direct project support (Tanger, Tetouan) according to project monitoring data (281,000 instead of 300,000 inhabitants)</p> <p>Tiznit (88,000 inhabitants) wastewater treatment plant has been well constructed but is not working for minor administrative reasons (counted as 50%). The project's influence (evolution in the sector) in Tanger and Tetouan cannot be verified fully (counted as 50%).</p> <p>Indicator 50% achieved.</p>

All project indicators were achieved within the planned project term as shown in Table 5, except MOI 5.

- The project contribution to MOI 5, regarding the wastewater plants in Tanger and Tetouan, could not be checked fully. The available documents date back to AGIRE II and cannot be counted here.
- An enormous effort was made to rehabilitate and improve the wastewater plant in Tiznit. However, the plant was not functioning at the time of the evaluation team's visit (September 2020).
- MOI 5 was a very ambitious objective in light of the general acceptance of wastewater reuse for agriculture, not only in Morocco (World Bank, 2017). AGIRE III concentrated considerable human and financial resources in the Tiznit plant, which was not functioning at the end of the project. A participative approach and the involvement of all partners, as achieved in an exemplary way in the Declaration of Marrakech (see below), could have reduced the problems. Covid-19 also contributed to the fact that time ran out before the plant was working.
- The Declaration of Marrakech (participative water resources management contract, part of MOI 2) was seen by all interviewees as a good model for the country in terms of approach, process and result.
- The achievements of MOI 1–4 were confirmed in the documents supplied and in interviews with the direct and indirect target groups.
- Particular emphasis was given by the direct target group to:
 - long-term thinking and planning
 - sustainability aspects, to anchor the results in relevant Moroccan institutions.
- The project contributed towards decentralisation of water resources management. This was confirmed by project staff and the direct target group.
- Partners highly valued the flexibility of the project. They stated that it was distinguished in the course of its actions and responded to the needs expressed by partners (Partners_8, 9, 10). The project supported administrations and was seen as having precise, time-bound targets and a fast, efficient style of working.

The project almost achieved the objective (outcome) on time in accordance with the project indicators (scores **35 out of 40 points**).

Effectiveness dimension 2: Contribution to achievement of objectives

The evaluation assessed the successful contribution of services implemented by the project to the achievement of results. The extent of achievement of the agreed project outputs and three outcome hypotheses and alternative hypotheses were examined, to explain causal relationships.

Table 6 summarises key findings on the extent that the agreed project outputs were achieved.

Table 7: The achievement of output indicators

	Indicators	Achievement
Output A The institutional, regulatory and organisational framework conditions are improved for integrated water resources management (IWRM) adapted to the effects of climate change.	A.1: Five technical or administrative procedures for integrated water resources management (IWRM) are updated or developed and made available to ABHs. Basic value: 0 Target value: 5	4 decrees and 1 manual Indicator achieved.
	A.2: Three river basin agencies use a unified management control system. Baseline value: 0 (a unified control system has been developed, but not yet implemented) Target value: 3 ABHs apply ground control systems	A unified control system is being financed by Enabel in Oum Er-Rbia but is not yet in use. AGIRE closely followed the fiche-suivi A2. All interview partners confirmed this. Indicator 10% achieved.
	A.3: Five implementing texts (decrees) of the new Water Law 36–15, considering	Six decrees, of which three have a quota of women (five are mentioned in the outcome

	aspects related to climate change and/or the gender approach for the implementation of IWRM, are agreed within the ministry in charge of water.	indicator) Three other decrees that are not related to climate change have been drawn up. Indicator achieved.
Output B Participatory management of water resources is improved.	<p>B.1: A unified approach for participatory water management contracts is shared at national level. Basic value: 0 (preliminary approach being tested) Target value: 1 unified approach is shared nationally</p> <p>B.2: Five (three+two) new participatory water management contracts are drawn up. Basic value: 0 Target value: 5</p>	<p>National workshops, partly with capacity development, decrees under discussion, orientation guide Indicator achieved.</p> <ul style="list-style-type: none"> • Tadla (5%) • (Fez-Meknes) (not counted) • Souss (20%) • N'Fis (30%) • Bahira (5%) <p>Indicator achieved 60%.</p>
Output C Tools for monitoring and evaluating water resources and their uses are applied.	<p>C.1: 3 River basin agencies have provided the ministry in charge of water (MDCEau, Ministère Délégué Chargé de l'Eau) with processed data on monitoring water resources. Basic value: 0 (the MDCEau does not have the data processed by ABHs) Target value: processed data from three ABHs</p> <p>C.2: The monitoring of land use and agricultural water consumption by satellite images is used to implement three participatory water management contracts. Baseline value: 0 (no agreement to implement participatory water resources management considers the use of satellite data for monitoring land use and agricultural water consumption) Target value: 3</p>	<p>Diagnosis, manual, capacity development measures Indicator 100% achieved.</p> <ul style="list-style-type: none"> • Chtouka • Souss • Haouz-Mejjate <p>Indicator achieved.</p>
Output D Good rainwater management practices, contributing to adaptation to climate change, are disseminated.	<p>D.1: Good rainwater management practices, contributing to climate change adaptation, are included in three planning or management documents. Basic value: 0 (a catalogue of good practices is available, but not integrated in the documents) Target value: 3 documents</p> <p>D.2: eight new projects disseminating good rainwater management practices are implemented by national partners. Basic value: 0 Target value: 8</p>	<ul style="list-style-type: none"> • Plan National de Valorisation des Eaux Pluviales • Plan de Gestion Environnemental et Social • Schéma d'Aménagement Intégré de l'Eau • Convention Eau, • PNE <p>Indicator achieved. Rainwater management has been included in five documents</p> <p>Indicator achieved. Nine new projects (instead of eight) have been implemented.</p>
Output E Good practices are disseminated for ecological sanitation and the recovery of sanitation products, contributing to climate	E.1: Good practices for ecological sanitation and/or the recovery of sanitation products, contributing to climate change mitigation and/or adaptation, are included in three planning or management documents. Basic value: 0 (a catalogue of good	<ul style="list-style-type: none"> • Mutualised national sanitation plan • Convention Eau Haouz-Mejjate • Programme 2020–2027 • PNE <p>Indicator achieved.</p>

change mitigation and/or adaptation.	practices including technical specifications is available, but not included in the documents) Target value: 3 Target value: 0 (Marrakech IWRM convention) E.2: Five new initiatives disseminating good practices in ecological sanitation and/or recovery of sanitation products are launched by national partners. Basic value: 0 Target value: 5	<ul style="list-style-type: none"> • Ecosystème Danone • Partenariat France-Maroc • Service Provinciale de l'Eau de Rabat • Ministère des Habous et des Affaires Islamiques • Grand Agadir • Oujda wastewater treatment plant • Settat wastewater treatment plant Indicator achieved (7 instead of 5 launched)
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Table 6 shows that nine out of eleven output indicators were fully achieved and two were partly achieved (10% and 60% respectively). Some additional information on the indicators is provided below.

Indicator A2: ABHs Tensift and Souss-Massa did not know about a unified management control system (Partners_3, 4, 5, 6, 7) for their own institution. The unified control system was supposed to be based on an institutional and operational support project called A3ABH and to be introduced first in ABH Oum Er-Rbia. However, an audit report by Enabel found that the project could not be used (Partner_1). AGIRE III closely followed up the A3ABH project with suggestions and guidance (correspondence was provided). The indicator was 10% achieved.

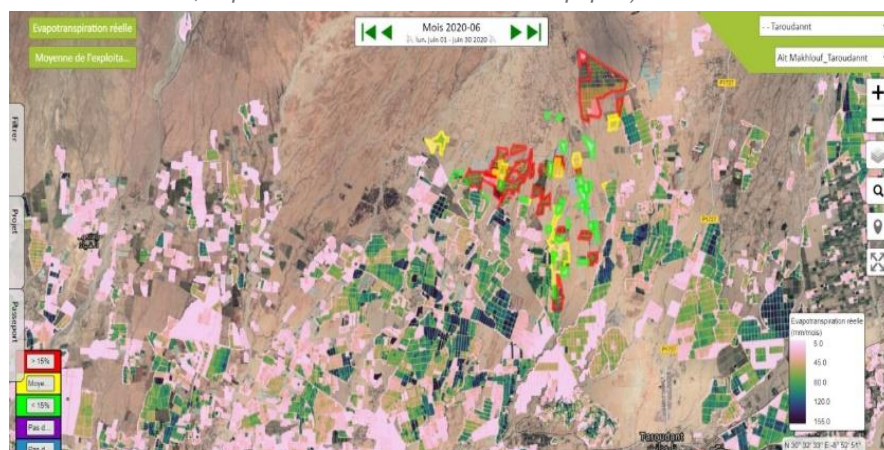
Indicator B2: the indicator states that five contracts should be drawn up by AGIRE III, that is, each contract should obtain a rating of 20%. The Haouz-Mejjate contract (Declaration of Marrakech) is widely considered exemplary for many participative management contracts in Morocco. A lot of time and effort went into it. Therefore, a higher rating of 30% was justified. The Souss contract was rated 20%. Two contracts were mentioned with no direct influence of the project (Bahira and Tadla). While no influence was found for the Fez-Meknes contract, it could be assumed that meetings for the Haouz Mejjate contract inspired the Tadla contract. The Bahira contract was drawn up in AGIRE II. Not much work was done on it in AGIRE III and it has not yet been signed. Five per cent (instead of 20%) was allocated to both contracts, which gives an overall rating for B2 of 60%.

Indicator C1: DRPE confirmed that the indicator was achieved.

Evidence from the references shows that the other indicators were achieved, as noted in the table above.

According to the project team, the Covid-19 pandemic contributed to the fact that two project indicators were not fully achieved. In particular, the capacity development could not be held as planned in face-to-face courses. Instead, most courses were held online. In online format, trainees had less time and interaction and some of the material was harder to teach (e.g. the use of satellite images is easier to explain in a face-to-face course).

Photo 4: Example of a satellite image to determine use of irrigation water (Source: 2016-2021 eLEAF, <https://fieldlook.com/sandbox/index.php/fr/>)



Key findings on how the project contributed to achieving the project objective (outcome) via activities, instruments and outputs (assessment dimension) are based on the following three hypotheses at outcome level.

To assess the successful contribution of services implemented by the project to the achievement of results, three outcome hypotheses were developed with the project team, considering the results model and particular knowledge interests. The hypotheses enabled the evaluation team to analyse the contribution of the project's activities and outputs to the achievement of its objective (outcome). These hypotheses were examined in detail to explain causal relationships between project activities, outputs and outcome. The contribution analysis was designed to construct a credible story to show whether the intervention was a relevant factor for change. For this purpose, alternative hypotheses were also formulated. The context and other factors that played a role in whether the intervention's objective was achieved were considered in the analysis.

To measure how these hypotheses lead to outcome and impact, the degree of achievement of the indicators and their contribution was measured by comparing the real value with the target value of the five outcome indicators (see Table 5). Climate change could have been included in the hypotheses. However, it is difficult to measure climate change effects within the project period, so this idea was discarded.

To collect data on **hypothesis 1** (and its alternative), discussions 'in the field' were held with water users (farmers from AUEA and AFEMAC) within ABH Tensift and Souss-Massa. Furthermore, interviews were carried out with personnel of ABH Tensift, ABH Souss-Massa, the wilaya in Marrakech and representatives of ORMVA and the Office National du Conseil Agricole. To collect data to examine **hypothesis 2**, interviews were held with technical and managerial personnel of ABHs Tensift and Souss-Massa, and with ORMVA and the Office National du Conseil Agricole in Marrakech.

Hypothesis 3 was examined by a visit to Tiznit wastewater treatment plant and ad hoc discussions with farmers who will benefit from irrigation with the wastewater. Critical questions were on payment for treated wastewater. To assess activity results, triangulation was applied by interviewing planners and implementers (ABHs, wastewater treatment plant and rainwater institutions) and beneficiaries (farmers and village inhabitants).

In all three cases, the 'zero' hypothesis (what would have happened without the project) was examined.

Table 8: Outcome hypotheses, alternatives and key findings

Hypothesis	Key findings
1. Participatory management contracts involve users to better control water consumption, and thus contribute to improving integrated water resources management.	<ul style="list-style-type: none"> • The project was the catalyst for participative water resources management contracts and accompanied the development and implementation of contracts. • The project helped to achieve a unified strategy for setting up participative management contracts, with a focus on the user. • These steps concentrate on users instead of the top-down procedure that was normally used before. • The project gave DRPE the initiative. Now it is continuing the work, for example it is preparing the PNE (all points made by Partner_8). • The proximity of the project to ABHs, for example in Marrakech, helped to reduce the mistrust of partners (GIZ). • Experts in territorial consultation were mobilised for this component, and were highly valued (GIZ, Partners_5, 6, 7). • The Wali decree and the agreements constitute a pledge for the sustainability of decisions taken on participative water resources management contracts (Other stakeholders_3). • The training of 19 AUEAs by the project started in 2016. The approach was how to cooperate and coordinate. After the training sessions, exchanges with the administration improved (Other stakeholders_10).

	<ul style="list-style-type: none"> • The water police established by law will ensure compliance with the implementation of the decree of the Contrat de Gestion Participative (control of extensions, authorisations to take samples, etc.). • Better tools are available to help ABHs to understand and control water withdrawals, while they obtain more reliable, faster information (Partners_3, 4, 5, 6, 7).
1b: Improved integrated water resources management has been achieved through participatory management contracts drawn up by DRPE and the relevant ABHs without input from the project.	<ul style="list-style-type: none"> • There are participative management contracts in Fez-Meknes, Dakhla and Berrechid, all facilitated by the relevant ABH (GIZ). • A participative management contract for Tadla was facilitated by the World Bank (GIZ). • Bougreg is also working on a participatory approach (Partner_8). • Other participatory management contracts have been drawn up in all Moroccan ABHs (Partner_8). •
2. Water resource assessment and monitoring tools provide better knowledge of the resource and its uses, which contributes to improving integrated water resources management.	<ul style="list-style-type: none"> • The tools facilitate management of the public water domain and aid the water police (Partner_8). • The ORMVAs will be very interested in using this tool to monitor the agricultural season, crop rotations and optimisation of irrigated areas, especially resource sharing if dam water is not available or insufficient. It is possible to determine which farms have access to the water table, estimate yields and forecast demand. The tool is also useful for detecting water theft along irrigation canals. It will support the water police, supervised by ORMVA, in their area of action (Other stakeholders_7). • This tool can be used by ORMVA, but there is no bilateral discussion yet (Partners_3, 4). • This tool has shown that in the Guerdane area, where water supplies are limited to 6,000 m³/ha, there are farmers who consume much more. Previously, this component was not controlled by ABHs. Now ABHs can monitor water consumption very closely (Partners_3, 4). • Another application of the tool is to overlay boreholes with images and to identify irrigated plots that are not authorised (Partners_3, 4). • We need to have good data for 'evidence planning' to improve IWRM (GIZ). • ABHs now have monthly data at a precision of 10 m with data accuracy exceeding 80%. Before, the data that were used were often from five years back (GIZ). • Interest in working with satellite images is growing due to the project's work. As a result of the project, ABHs have capacity in this area and participated in good training sessions. ABHs are astonished at what good quality data are now available (GIZ). • ABHs can integrate the data into planning documents. ABHs can also check water consumption and unauthorised new water points (GIZ).
2b. Water resource assessment and monitoring tools can provide better knowledge of the resource and its use but will not be applied in the future as they are too expensive and too complicated to be used.	<ul style="list-style-type: none"> • The risk of public budget cuts is always present. • From the beginning, the project tried to raise awareness, especially of ABH directors. The project integrated ABHs in the call for tenders for the satellite image process. • The project held workshops with DRPE to keep them in the loop and involve them (all comments by GIZ). • Component C has helped ABHs considerably. It is a very important tool and they asked to continue to use it (Partner_8). • The cost of this tool is high, but currently ABHs can reduce the cost because they have the right skills (Partners_3, 4). • ORMVA is not aware of the tool acquired by ABH. ORMVA has been working for several years with Kadi Ayad University in Marrakech. The SAMIR tool can be used to monitor real evapotranspiration from satellite images. ORMVA needs these tools to monitor reconversion projects: land use, abstraction of dam water and groundwater, water productivity, etc. ORMVA is also working with an irrigation tool at the SATIR plot that uses satellite images for irrigation management (Other stakeholder_2).
3. Planning and management documents incorporate good practices in rainwater	<ul style="list-style-type: none"> • Rainwater harvesting • DRPE is convinced about rainwater harvesting and diffuses material on this topic.

management and ecological sanitation (including wastewater reuse). These are used by stakeholders, and thus contribute to improving integrated water resources management.	<ul style="list-style-type: none"> • The Netherlands are working on rainwater harvesting, as is Switzerland (cofinancing the project) and the World Bank in Marrakech. • Douar Hamri: the project enabled the creation of income by collecting rainwater from roofs and a family garden (Other stakeholders_12). • Water agreement with ABH: mobilisation to preserve rainwater (Stakeholders_5, 6, 7). • Ecological sanitation and wastewater reuse • Reuse and ecosanitation is an innovative programme that AGIRE I started. We hope that we can continue with it, with support from GIZ (Partner_8). • A positive result will be observed in the palm grove of Tiznit. Water reuse will revive the palm grove and create new professions linked to reuse (wastewater treatment technicians, etc.) (GIZ). • Treated wastewater can replace conventional water and therefore increases water availability. This creates wealth, saves water and increases income (Partner_9). • AGIRE III facilitated and federalised reuse projects. Studies were carried out and water analyses (Other stakeholder_7). • The Oujda project was blocked following the discovery of salmonella in the waters. The government is committed to the agreement to carry out the co-complementary treatment, so it asked GIZ to launch a study (Other stakeholder_7).
3b. Stakeholders are familiar with the planning and management documents incorporating good practices in rainwater management and ecological sanitation but do not put them into practice and thus cannot contribute to improving integrated water resources management.	<ul style="list-style-type: none"> • Ecological sanitation and wastewater reuse • The Sustainable Water Integrated Management (SWIM) project was carried out by the Global Water Partnership. There was a division of tasks between GIZ and SWIM. The latter was in charge of studies and decrees (GIZ). • Agence Française de Développement: faecal sludge reuse (led by the Interior Ministry) (GIZ). • Enabel carried out three studies. The procedure was different from GIZ. The projects were carried out in co-management. The advantage of this management method is total ownership by the partner (Partner_8). • Belgian cooperation worked in parallel on the programme to upgrade the environment for rural schools (Partner_8).

Hypothesis 1 was largely verified. Key findings show that the project contributed significantly to a new approach in participative water resources management contracts and influenced participative management contracts in other spheres (e.g. water sharing between stakeholders for wastewater reuse).

There are other participative water resources management contracts within the country (alternative hypothesis 1a) and more are being planned. However, the project (AGIRE) was the catalyst for participative water resources management contracts and assisted in a unified, user-centred strategy. This is linked to hypothesis 2, as water resource assessment and monitoring tools are also helping to better control water consumption.

It can be safely deduced that these participative water resources management contracts help to better control water consumption, and thus contribute to improving integrated water resources management.

→ Hypothesis 1 is verified. The alternative hypothesis is not proved wrong but it is confirmed that the project made a big contribution to improving integrated water resources management.

Hypothesis 2: There is no doubt that water resource assessment and monitoring tools are important for the work of ABHs, organisations of farmers and organisations that work for farmers (AUEAs, the Office National du Conseil Agricole and ORMVAs). The tools developed by the project facilitate management and support the newly created water police (Partner_8). Farmer-related organisations are especially interested in remote sensing and monitoring tools and have already voiced their interest (Other stakeholders_7). It is hard to understand why these highly valuable tools (as judged by ABHs) were not shared from the outset with farmer-related institutions, at least with a view to dividing the monthly costs incurred. The tools have helped ABHs

considerably. They are seen as important tools and ABHs asked to continue to use them (Partner_8). Negotiations are under way to reduce the resolution of the maps and their extent (Partner_4), to continue to be able to make use of the service. Various products are available for satellite imagery and interpretation and cost certainly plays an important role. However, the main users (ABHs) have strongly requested the system introduced by GIZ, which is apparently the most stable and reliable (GIZ, 2020) that is currently available worldwide. Plans are underway to reduce costs and share them with other interested stakeholders (e.g. from the agricultural sector), which shows that the results are highly valued.

The hypothesis was verified, as all concerned valued the water resource assessment and monitoring tools and confirmed that they provide better knowledge of the resource and its uses. Stakeholders have creative ideas about how to make use of these tools under the financial restrictions induced by Covid-19. The alternative hypothesis could not be validated. Better knowledge of the resource and its use will contribute to improving integrated water resources management. It will be applied by the water police and to follow up participative water management contracts.

Hypothesis 3 combines two technologies, that is, rainwater management and ecological sanitation (including wastewater reuse), which were introduced in AGIRE I. The hypothesis was verified. The two technologies are dealt with separately in this chapter.

DRPE is convinced about rainwater management and diffuses materials developed by the AGIRE projects and their own materials. Other donors (Netherlands, Switzerland and the World Bank) became convinced of its benefits and are now funding rainwater management. A direct impact could be seen at Douar Hamri, where the project enabled income creation through rainwater collection that led to planting of family gardens (Other stakeholders_12). Alternative hypothesis 3a is disproved as Douar Hamri shows rainwater harvesting in practice, as do other projects mentioned as indicator D2. The National School of Architecture in Marrakech and the Hassania School of Public Works have made rainwater management part of the curriculum. The courses will be partly taught by staff from ABH Tensift (curricula, meeting and symposia protocols and letters requesting lecturers on the subject were provided). Rainwater management is included in PNE and seen as an important contribution to improved water resources management. A PNE study (GIZ) found a potential of 300 million cubic metres of rainwater that could be used to save groundwater abstraction. Rainwater management is therefore an appreciated contribution to integrated water resources management.

Innovative programmes of wastewater reuse and ecosanitation are attributed to AGIRE and it is hoped that GIZ will continue to support these (Partner_8). AGIRE III focused on wastewater reuse with studies, guides for planning and management, support for legislation and concrete actions such as the construction of a treatment plant for wastewater reuse in agriculture (Tiznit). There is wide recognition (e.g. Partners_8, 9, Other stakeholders_7) of AGIRE's work in this sector.

Other actors like the Sustainable Water Integrated Management (SWIM) project by the Global Water Partnership, the Agence Française de Développement and Enabel are or were working in the sector (Partner_8). A large number of activities use treated wastewater mainly for golf courses and green spaces and some projects are under construction for reuse in agriculture (DRPE, 2020) (GIZ). Evidently, the alternative hypothesis cannot be verified.

AGIRE III facilitated and unified reuse projects. It is recognised that treated wastewater can replace conventional water and therefore increases water availability. This creates wealth, saves water and increases income (Partner_9).

The project contributed to the project objective to a good extent (scores **27 out of 30 points**).

Effectiveness dimension 3: Unintended results

The identified unintended negative results (see Section 2.2) were examined by questions added to the evaluation matrix.

Key findings on unintended positive results

- Families remain independent by creating their own ecological gardens (capacity building in agroecology). During the pandemic, they took advantage of their gardens to sell their produce locally and thus mobilised income (Other stakeholder_12).
- The Prime Minister became interested in rainwater harvesting and the government is working on a book about it (GIZ). The AGIRE rainwater guides have had positive results and 'unforeseen' success (Partner_8). The Netherlands embassy also became very interested in the topic. They financed a study tour and developed a rainwater harvesting strategy with the help of the project.

Key findings on unintended negative results

- Wastewater reuse can have a negative impact when new land areas are irrigated instead of substituting water resources (GIZ). This potential risk could not be verified at the time of the evaluation, as Tiznit treated wastewater was not yet used for irrigation. However, this was a real risk in the Souss-Massa watershed (Chtouka desalination plant), where desalination was planned and implemented as an additional water source for irrigation. As a possible extension of large-scale agriculture to the detriment of small-scale agriculture was considered a negative result, the project withdrew from involvement in this project (GIZ).
- Inadequate controls and sanctions of water use may work against project achievements (e.g. participative water resources management contracts) (GIZ). The project therefore supported the establishment of water police.
-

The project was aware of possible unintended negative results and tried to respond to them. Positive unintended results were seized by the project (scores **27 out of 30 points**).

Table 9: Rating of OECD/DAC criterion: effectiveness

Criterion	Assessment dimension	Score and rating
Effectiveness	The project almost achieved the objective (outcome) on time in accordance with the project indicators.	35 out of 40 points
	The project contributed to intended overarching development results to a good extent.	27 out of 30 points
	The project was aware of possible unintended negative results and took efforts to respond to them. Positive unintended results were seized by the project.	27 out of 30 points
Effectiveness score and rating		Score: 89 out of 100 points Rating: Level 2: successful

4.4 Impact

The evaluation basis for assessing impact was the intended overarching development results, SDG 6 (dimension 1) and selected results hypotheses (dimension 2). Semi-structured interviews were key reference points for assessing additional unintended positive and negative results (dimension 3).

The evaluation design followed the standardised guiding analysis questions in the evaluation matrix and applied the minimum standard required (contribution analysis). The contribution analysis was based on two hypotheses and their alternatives underlying the results model. They were formulated with the project team (see the description of dimension 2). The data status and data collection possibilities allowed the application of the evaluation design (see Section 1.1 and Chapter 3). The impact was assessed using the mix of empirical methods described in the chapter on Effectiveness.

The analysis was structured according to the set of assessment dimensions. The following information was collected during the evaluation mission.

Impact dimension 1: Overarching development results

The occurrence of overarching development results was assessed, including a reduction in the overuse of water resources, increased food security and active involvement of women and user groups. SDG 6 was also considered.

Intended overarching development result: IWRM contributes to a reduction in the overuse of water resources.

This relates to the following points.

- Target 6.4 on the sustainable management of water resources. AGIRE III met this target through the project outcome and the respective five outcome indicators.
- Target 6.5, indicator 6.5.1, on the degree of implementation of integrated water resources management. The outcome of the AGIRE III project corresponds to this target. A number of participatory management contracts have been implemented in local administrative units that have introduced policies and procedures to encourage participation of the local population (GIZ, 2018).
- PNE and the Integrated Water Resources Management Master Plan (Plan Directeur d'Aménagement Intégré des Ressources en Eau, PDAIRE) have integrated the objectives of SDG 6 (Partner_10).

The interactions between social, economic and environmental dimensions (see Section 2.2) were considered. The programme proposal (GIZ, 2018) states that the integrated, ecologically sustainable, climate-adapted, economically efficient and socially equitable management of water and related resources must contribute to improving and guaranteeing the sanitary, economic and social living conditions of the Moroccan population without endangering the sustainability of the country's ecosystems and vital resources.

Better management of water resources contributes to a reduction in their overuse. This can be observed in:

- The AGIRE III studies, which innovated in approaches and solutions (Partner_11) and established participative water management contracts, workshops and a decree for participatory management contracts (Partner_11), which were all designed to reduce overuse of water resources.
- The project that equipped ABHs with a participatory management approach, monitoring of water resources with satellite images, analyses and the establishment of water police, with the aim of reducing water overuse.

The partners (Partners_5, 6, 7) acknowledged that aquifer water balance could be reached by 2030 with the project interventions (Declaration of Marrakech). Aquifer water was out of balance and overused at the time of the evaluation.

Intended overarching development result: IWRM contributes to food security and poverty alleviation

The support for participatory water resources management contracts in the perimeter of N'Fis reached more than 14 AUEAs with a diverse typology of farmers (small, large, intensive, extensive, etc.) and forms of organisation (including AUEAs, reconversion associations and cooperatives). Previously, small farmers' access to water suffered from large national irrigation network projects, the lowering of groundwater levels and poor supervision. Now, they are increasing their income through organisation in AUEAs, so that they obtain a fairer share of water resources and know how to use the available water more efficiently (Other stakeholders_12, 13).

The AGIRE project contributed to SDG Target 6.3, Indicator 6.3.1 (Proportion of wastewater treated without danger) with outcome 5: Recovery of wastewater/sanitation products for 300,000 inhabitants. This indicator was halfway reached (50%). The additional irrigation water source will help farmers (when they receive treated wastewater for irrigation) to improve their living conditions and it contributes to poverty alleviation.

Intended overarching development result: women and user groups are actively involved in IWRM

A decree (prepared by the project) on the constitution of committees treats vulnerable groups and women fairly by introducing quotas so that women can be actively engaged.

Treated wastewater increases water availability. This helps to save precious groundwater and contributes to increased income of farmers (see above), which leads to better access for girls to schools and an improvement in quality of life (Partner _10). Small farmers are integrated and participate in IWRM under the umbrella of AUEAs. The applicable decrees do not distinguish between categories of citizens yet.

Furthermore, three of the five published decrees (see Component A) contribute to gender equality:

- The Basin Council Decree, containing a quota for women, submitted to the General Secretariat of the Government on 24 September 2018
- The Decree of the Superior Council for Water and Climate (CSEC), containing a quota for women, submitted to the General Secretariat of the Government on 24 September 2018
- Prefectural and provincial water commissions, containing a quota for women.

Women should now have an opportunity to voice their interests better than before.

In this context, national partners carried out nine projects to disseminate good practices and the use of rainwater. Three of these projects were focused on remote rural areas and involved poor populations:

Photo 5: The finished treatment plant in Tiznit, organisational issues have prevented the use of the plant as algae grow in the sandfilter (Source: El Meknassi, 2020)



- The construction of two *metfias* (water reservoirs) for storing collected fog water in the region of Sidi Ifni, which was implemented by the Département de l'Eau and Services Provinciaux de l'Eau in Guelmim (2017).
- A rainwater harvesting project carried out in Douar el Hamri (ABH Tensift, 2017).
- The construction of a *metfia* in the centre of the AFEMAC association, an organisation for training in agroecology and solar energy (AFEMAC, 2017/18). The project has launched new initiatives that disseminate good ecological sanitation practices and/or recycling of sanitation products. Poor farmers were able to create additional income (see also Table 8, key findings for hypothesis 3).

Thus, intended overarching development results occurred in the targeted areas (scores **40 out of 40 points**).

Impact dimension 2: Project's contribution to the intended impact

To assess the project's contribution to intended overarching development results, the impact hypotheses and alternatives were examined to explain causal relationships between outcome and impact.

Hypotheses:

- increased integrated water resources management (outcome) is likely to contribute to a reduction in the overuse of water resources (Impact I1), and
- increased integrated water resources management (outcome) is likely to contribute to active involvement of women and user groups (Impact I3).

Alternative hypothesis:

- a reduction in the overuse of water resources cannot be linked to the project's contribution.

Key findings on the project's contribution to intended overarching development results are given in the table below.

Table 10: Impact hypothesis, alternative and key findings

Hypothesis impact	Key findings
Increased integrated water resources management (outcome) is likely to contribute to a reduction in the overuse of water resources.	<ul style="list-style-type: none"> • The connection is very clear: ABH has the necessary tools to discover excessive water use. A water police force (that is not yet well trained but will be in three years) has been established that can stop overuse. The tools will make ABHs and their arms (like the water police) more effective. In Haouz-Mejjate, for example, we have a lot of actors together. The concept was always to mobilise other actors (GIZ). • Without the project, the water deficit would be 300 million cubic metres. With the implementation of the Declaration of Marrakech's action plan, aquifer water balance could be reached in 2030 (GIZ, Partners_5, 6, 7). • There has been a reduction in overexploitation that is attributed to the project. The governance problem was managed to introduce all the instruments required to control overexploitation (GIZ). • Useful studies and tools enabled ABH to reappropriate the skill of monitoring water resources.
Alternative hypothesis: A reduction in the overuse of water resources cannot be linked to the project's contribution.	<ul style="list-style-type: none"> • Revision of the water law facilitated the implementation of regulatory and institutional reforms. The AGIRE III project has helped to accelerate these reforms by supporting the preparation of regulatory texts. • Other ABHs have developed participative water management contracts, but they have not been signed yet. The approach adopted in these pool contracts differs from that pursued by the AGIRE III project, in that there was no involvement of end users. The consultation workshops were only attended by institutional stakeholders (GIZ). • Other donors worked on different aspects. For example, Enabel worked on management of the public water domain and the World Bank worked on a water management contract in Tadla inspired by the project. • Bouregreg ABH is also working on a participatory approach for a participative water management contract for the Berrechid aquifer (Partner_8).

	<ul style="list-style-type: none"> • If it were not for the project, administrative procedures relating to participative water management contracts would have taken a long time. Different tools, training and knowledge building would not have been provided (Partner_11).
Increased integrated water resources management (outcome) is likely to contribute to active involvement of women and user groups.	<ul style="list-style-type: none"> • The inclusion of women's quotas in the decrees is a success of the project, and allows active involvement of women (GIZ). • The gender workshops carried out by AGIRE III led to the introduction of women in the water police (Partner_11). • The training sessions carried out by the project especially in offices with qualified personnel had 50% or more women participants (GIZ). • Almost all the pilot projects involved women and different groups (GIZ).

The outcome of the project was to improve the integrated management of water resources (IWRM). Participatory management contracts make it possible to involve users and better control water consumption. This contributes to a reduction in the overuse of water resources. All project components contributed to this outcome.

- AGIRE's support for the provisions of the law aimed to preserve water resources by preparing the implementation decrees (output A).
- Support focused on the balance between available resources and water uses (output B).
- Large-scale implementation of tools and innovations was developed during phases I, II and III (output A, B, C, D and E). Examples are the reference maps integrated into participative water management contracts, satellite imagery and the Centre Royal de Télédétection Spatiale maps used by ABHs to control the overuse of aquifers.
- The design and support of innovative activities was financed by METLE and other partners (output C, D and E).

A Decision Tree Framework has been developed by the World Bank (Ray and Brown, 2015). This framework could have been considered by the project to help in planning and showing the impact of the project. The project contributed to intended overarching development results to a very good extent (scores **28 out of 30 points**).

Impact dimension 3: Contribution to unintended results

The analysis of specific risks (see Chapter 2) was the starting point for assessing unintended negative results at the level of overarching development results. In addition, standardised questions in the evaluation matrix were part of the qualitative and semi-structured interviews (with the target group, other stakeholders and donors) and discussions with the indirect target group.

Unintended positive results were observed.

Positive synergy was noticed in the training in agroecology. The participants could further develop their agricultural activities and increase their income (Other stakeholders_12). In Douar Arazane where rainwater harvesting was installed, ecosanitation and agroecology were introduced. Families have become more autonomous by creating their own ecological gardens. During the pandemic, they took advantage of these gardens to sell their produce locally and thus mobilised income (GIZ: output D, Partner_8).

Positive contributions of partners were reported that create awareness of water saving to combat water overuse (for example, housing projects with rainwater harvesting, the wilaya undertaking to modernise public buildings with water saving in mind). Town planning efforts have been made in projects to purify water from the craft industry or vegetable processing so that the water body is not polluted. As a result, more water is available for irrigation.

The rainwater harvesting guides have had ‘unforeseen’ success. DRPE has a toolbox and diffuses it at high level. The Prime Minister voiced his interest. The Netherlands became interested in rainwater harvesting and GIZ assisted in the development of a strategy. Rainwater harvesting contributes to saving water resources.

A negative aspect is that, despite major efforts, the sector strategies of some ministries differ from the objectives of ABHs, which aim for long-term sustainability of water resources. The AGIRE III project tried to adopt a win-win approach to harmonise differing strategies by promoting consultations between institutions and by integrating users into participatory management contract processes. These efforts have not been continued and should be increased in the future.

Some positive results occurred at impact level. Observed unintended negative results were seized by the project to some extent (scores **25 out of 30 points**).

Table 11: Rating of OECD/DAC criterion: impact

Criterion	Assessment dimension	Score and rating
Impact	The intended overarching development results have occurred.	40 out of 40 points
	The project contributed to intended overarching development results to a very good extent.	28 out of 30 points
	Positive result occurred at impact level. Observed unintended negative results were seized by the project.	25 out of 30 points
Impact score and rating		Score: 93 out of 100 points Rating: Level 1: highly successful

4.5 Efficiency

Evaluation basis and design for assessing efficiency

The **evaluation basis** for assessing efficiency, namely production efficiency (dimension 1) and allocation efficiency (dimension 2) was the GIZ efficiency tool. It is based on the cost data that were provided.

Table 12: Project scorecard of the GIZ efficiency tool

Modulziel Indikatoren	1. 5 textes d'application de la nouvelle loi 36/15 prenant compte du changement climatique pour la mise en œuvre de la GIRE, dont 2 contribuant à l'égalité des sexes, sont soumis pour approbation.	2. Dans les bassins du Tensift, du Souss-Massa-Drâa et de l'Oum Er Rbia, des Contrats de Gestion Participative de l'Eau bénéficiant à 3.2 Mio d'habitants sont en cours de mise en œuvre.	3. L'extension des superficies irriguées et la consommation d'eau agri-cole sont suivies par les ABH pour une surface de 28.000 km² avec 6,4 Mio. d'habitants à l'aide des données satellitaires.	4. 10 multiplicateurs nationaux ont lancé des initiatives intégrant des bonnes pratiques de gestion des eaux pluviales.	5. Les eaux usées/produits d'assainissement de 300.000 habitants sont valorisés.
Zielerreichung	100%	100%	100%	110%	50%

	Output A	Output B	Output C	Output D	Output E
Outputs	Les conditions cadres institutionnelles, réglementaires et organisationnelles, pour une gestion intégrée des ressources en eau (GIRE) adaptée aux effets du changement climatique sont améliorées.	La gestion participative des ressources en eau est améliorée.	Des outils de suivi et d'évaluation des ressources en eau et de leurs usages sont appliqués.	Des bonnes pratiques de gestion des eaux pluviales (GEP), contribuant à l'adaptation au changement climatique, sont disséminées.	Des bonnes pratiques d'assainissement écologique et de valorisation des produits de l'assainissement contribuant à la mitigation et/ou à l'adaptation au changement climatique sont disséminées.
Kosten inkl. Obligo	891.175,03 €	852.162,07 €	1.444.975,75 €	602.703,28 €	1.140.192,87 €
Ko-Finanzierungen	0,00 €	0,00 €	0,00 €	0,00 €	0,00 €
Partnerbeiträge	0,00 €	0,00 €	0,00 €	0,00 €	0,00 €
Gesamtkosten	891.175,03 €	852.162,07 €	1.444.975,75 €	602.703,28 €	1.140.192,87 €
Gesamtkosten in %	16%	16%	27%	11%	21%
BMZ Gesamtkosten in % ohne Kofi	16%	16%	27%	11%	21%

Plan für Restmittel	0,00 €	0,00 €	0,00 €	0,00 €	0,00 €
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Output Indikatoren	A.1: 5 procédures techniques ou ad-ministratives pour une gestion intégrée des ressources en eau (GIRE) sont actualisées ou développées, et mises à la disposition des ABHs .	B.1: Une démarche unifiée pour les Contrats de Gestion Participative de l'eau est partagée à l'échelle nationale.	C.1: 3 Agences des Bassins Hydrauliques ont mis à la disposition du Ministère Délégué chargé de l'Eau (MDCEau) les données traitées pour le suivi des ressources en eau	D.1: Des bonnes pratiques GEP contribuant à l'adaptation au changement climatique sont intégrées dans 3 documents de planification ou de gestion.	E.1: Des bonnes pratiques d'assainissement écologique et/ou de valorisation des produits de l'assainissement, contribuant à la mitigation et/ou à l'adaptation au changement climatique, sont intégrées dans 3 documents de planification ou de gestion.
Zielerreichung	100%	100%	100%	100%	100%

Output Indikatoren	A.2: 3 Agences de Bassins Hydrauliques utilisent un système unifié de contrôle de gestion.	B.2: 3 nouveaux Contrats de Gestion Participative de l'eau sont élaborés.	C.2: Le suivi de l'occupation de sol et de la consommation en eau agricole par images satellitaires est utilisé pour la mise en œuvre de 3 Contrats de Gestion Participative de l'Eau.	D.2: 8 nouveaux projets disséminant des bonnes pratiques GEP sont réalisés par des partenaires nationaux.	E.2: 5 nouvelles initiatives disséminant des bonnes pratiques d'assainissement écologique et/ou de valorisation des produits de l'assainissement sont lancées par des partenaires nationaux.
Zielerreichung	10%	60%	100%	113%	140%

Output Indikatoren	A.3: 5 textes d'application de la nouvelle loi sur l'eau 36/15 prenant en compte les aspects liés au changement climatique et/ou l'approche genre pour la mise en œuvre de la GIRE sont concertés au sein du Ministère Délégué Chargé de l'Eau	0	0	0	0
Zielerreichung	120%	0%	0%	0%	0%

The evaluation design followed the minimum standard required using the GIZ efficiency tool (see Table 9, project scorecard), which applies the follow-the-money approach. Standardised questions from the evaluation matrix were part of the qualitative and semi-structured interviews with the direct target group and the project team. During the inception mission, the initial information (data) was entered into the efficiency tool in cooperation with the project team. On completion of the project, the efficiency tool was updated with the final financial data and the results-based monitoring data. Consequently, the comparability of costs and results was assured and reflected the full project period. Thus, the data status and data collection possibilities allowed the application of the evaluation design (see Section 1.1 and Chapter 3).

As stated, the empirical methods to assess efficiency included use of the efficiency tool, analysis of the respective findings according to standardised questions from the evaluation matrix, and qualitative cross-checking of findings with the direct target group and the project team.

Analysis and assessment of efficiency

The analysis and assessment of efficiency were structured according to a set of assessment dimensions.

The rather new procedure for preparing a cost estimation and projection per output were not required at the time of project planning and conception. Thus, real costs per output were allocated retrospectively to comply with the follow-the-money approach.

Assessment dimension 1: Production efficiency

To assess the project's use of resources (production efficiency), the efficiency tool was jointly developed and discussed with the project team. Findings of interviews carried out with the direct target group were also taken into consideration. The financial statement (*Obligo-Bericht*, cost commitment report sheet, dated 2 September 2020) shows a surplus of EUR 506,671.92 (*Restbetrag*, remaining amount), which was reduced to EUR 270,000 (GIZ project head, 24 October 2020). The last increase of EUR 240,000 (remaining funds from the previous project) was not implemented until June 2020, that is, about three weeks before the end of the project. It was therefore not possible to spend these funds, which explains why they were left over.

The yearly target and actual costs were not stated in the project and are not part of the analysis. It was not required to project the budget at output level at the time of project planning and conception.

Following the money by analysing costs spent per output resulted in the following percentages of targets achieved (averaged over the output) and costs spent (see Table 8): Output A (77%/16%), Output B (80%/16%), Output C (100%/27%), Output D (106%/11%) and Output E (120%/21%).

Output A absorbed the highest percentage of personnel cost for international personnel (29%) and Outputs D and E the lowest (12%). Costs for national personnel were distributed more evenly between the outputs (from 18% to 22%).

The high concentration of one participative management contract in ABH Tensift was used as a model for other contracts over a large area of Morocco but failed to fully achieve Output B (Indicator B2).

The relatively high costs of Output C are clear and the results were highly valued by all concerned. The satellite image analysis of Component C was considered an important topic and a step forward in irrigation monitoring that is useful for the entire country. A budget increase was therefore requested. The alternative to monitoring using satellite data is the previous situation with terrestrial control carried out by consulting companies. For the same area and the same accuracy, it would be manyfold more expensive (Partner_4, 7).

Output E absorbed 54% of the total procurement, mainly for the treatment plant at Tiznit. To achieve Output E in time, rather high hardware expenditure was necessary. Desalination is an alternative to make additional water available for irrigation (Component E, reuse of treated wastewater). However, seawater desalination projects are the most expensive option, as discussed in the literature (Cooley and Phusiamban, 2016).

There was continuous reflection of the use of resources during project team meetings, component meetings and yearly operational planning workshops with all partners. Resource allocation at output level had to consider the diverse interests of partners with regard to outputs, and balance support for partners to avoid negative effects. The allocation of costs to project outputs seemed reasonable and in accordance with existing commitments.

Thus, the project's use of resources with regard to the outputs was very good (scores **65 out of 70 points**).

Assessment dimension 2: Allocation efficiency

This dimension also builds on the efficiency tool (see Table 9). The focus was the relation between resources and outcomes and possible use of reallocation to maximise outcome. The assessment of synergies and/or leverage of more resources was carried out partially.

All module indicators were reached with 100% or more, except for module 5 with only 50%. A lot of resources were committed to the treatment plant in Tiznit. However, at the end of the project, this plant was not operational.

Key findings on the project's use of resources with regard to the achieved project objective (outcome; assessment dimension of allocation efficiency) are:

- Scaling-up (horizontally and vertically) was an integral part of the project design from the beginning. It was clear that the project's objective was to go beyond demonstration projects. Therefore, a high percentage of staff costs had to be expected (87% of the total project costs) compared to projects with high procurement in kind (for example, construction projects and demonstration equipment).
- There are many examples where costs were avoided by looking for synergies. There was cooperation with the Belgian Enabel at one ABH to develop a unified management control system. However, the results were not as satisfying as expected (Partner_1). The Netherlands financed part of a European study tour on rainwater harvesting. Beyond cofinancing the project, Switzerland additionally financed 36 person months of qualified work. This enabled the project to access the Swiss economy and a public-private partnership. However, the Swiss personnel had some conflicts of roles and were in a position in between the project and Swiss Development Aid. A public-private partnership (with Coop Switzerland) received extra funding as did gender-related activities (see above), funded by BMZ.
- The use of synergies corresponds with reflections on the use of resources. The project considered the available options. One example can be found in Tiznit: the project procured the materials because it was cost effective (and time effective). Another example is the satellite images: an international tender was announced, and national institutions were asked to bid (but did not in the end). Alternatives were considered during the design and in the course of implementation. The project tried to work with local personnel and expertise as much as possible. The project decided to give the contract for participative water management to an international consulting company (to obtain international expertise) but insisted on employing a maximum number of local consultants.
- The project had envisaged cooperation with Kreditanstalt für Wiederaufbau (KfW) on participative water resources management contracts (Other stakeholders_17). Planning of management contracts were financed but administrative hurdles prevented the financing of contract implementation.
- An analysis of the cost of personnel, services and procurement of goods shows:
 - Costs of employed professionals (internal staff) were divided in a ratio of around 50% to 50% between international and national professionals.
 - Costs of external staff were in the same order of magnitude as those of internal staff. The ratio between central personnel and local personnel was 36% to 64%.
 - The procurement of goods accounted for around 16% of the total costs at a ratio of 33% to 67% divided between central and local procurement.
- Qualified personnel (international and national) and the use of excellent consulting companies were highly appreciated by the partners. For example, the consulting company supporting the participative water resources management contracts was highly valued (Partners_3, 4, 5, 6, 7), as was the world-renowned consulting company for the processing and use of satellite images (Partners_5, 6, 7).
- The number of project staff (internal and external) and the ratio between international and national personnel as well as central and local personnel seems balanced and appropriate for the results achieved.
- The share of overarching costs was 9% of the total budget, which is low in relation to the budget spent for achievements at output level.
- The costs of capacity development could not be determined as they are contained in the personnel costs.
- The project combined trips so that staff could participate in international conferences to obtain an international perspective on the issue.

The overall possibilities of reallocation of resources are seen as rather limited in the context of AGIRE III and its outcome. The cofinancing agreement defined concrete indicators in addition to those established previously. In terms of budget flow (GIZ, 2020), this projection is very much in line with the actual value, considering the aforementioned minimal surplus as a small percentage, and reflecting budget increases and corresponding extensions of the project outputs.

The outcome-resources ratio and alternatives were not considered during the conception of the project as they were not required at the time. They were calculated automatically during the implementation process as part of the monitoring, and in corresponding discussions at team meetings and component meetings.

Almost complete achievement of MOIs implied that the outcome-resources ratio was considered. The project could make use of the maximum principle fully. Actions were in line with estimated costs and the intended project objective. Furthermore, the project was designed using a scaling-up approach. Further opportunities to scale up were actively sought and contributed to the project's high efficiency.

The use of resources to achieve the project objective was very good (scores **25 out of 30 points**).

Table 13: Rating of OECD/DAC criterion: efficiency

Criterion	Assessment dimension	Score and rating
Efficiency	The project's use of resources is appropriate with regard to the outputs achieved. (Production efficiency)	65 out of 70 points
	The project's use of resources is appropriate with regard to achieving the project's objective (outcome). (Allocation efficiency)	25 out of 30 points
Efficiency score and rating		Score: 90 out of 100 points Rating: Level 2: successful

4.6 Sustainability

Sustainability was assessed on the basis of two dimensions: a prerequisite for ensuring the long-term success of the project (dimension 1) and the forecast of durability (dimension 2).

The evaluation design followed the standardised questions from the evaluation matrix. The data status and data collection possibilities allowed the application of the evaluation design (see Section 1.1 and Chapter 3).

Sustainability was assessed using the mix of empirical methods described in the chapter on assessing relevance. In addition, results of predecessor projects (AGIRE I and AGIRE II) were considered by analysing the corresponding final reports and the available evaluation reports.

Sustainability can only be observed after some years. The project ended two months before the evaluation mission took place. Therefore, the sustainability assessment was based on identifying factors that the evaluation team considered to be sustainable if no big events change the planned course of the country's development. Possible Covid-19 effects were considered.

The analysis was structured according to the assessment dimensions.

Sustainability dimension 1: Anchorage of the results in the partner system

Sustainability dimension 1 assesses sustainability with respect to possible anchoring of the results in the partner structures, which is considered a prerequisite for ensuring the long-term success of the project.

The project was designed for sustainability, as it built on the predecessor projects AGIRE I and II, which were phases of demonstration projects and entailed the search for technologies and approaches adapted to the context of the country. AGIRE III focused on capitalising on these experiences and integrating them into the existing legal framework, the administration and relevant institutions, and thus spreading them and multiplying

their application. The project made considerable efforts to ensure that the results could be sustained by the partners themselves. It had a strong sustainability or exit strategy, although it was not explicitly mentioned. The strong emphasis on capacity development was highly appreciated by partners: 'the whole project was geared towards concrete results and capacity development of partners' (Partner_8). This increased the competence and job satisfaction of personnel. Additionally, the organisation of workshops, symposia, round tables and topical meetings with concerned administration and specialists was valued. The relevance of working at scale and on three levels (micro, meso and macro) is producing results. Evidence for sustainability on the three levels is described below.

At national level, DRPE has been strengthened with decrees for the new Water Law 36–15. This is expected to result in continuing overall sector coordination and policy guidance. The decrees that have been signed and implemented will ensure the sustainability of the approaches that have been developed. For example, the establishment of an integrated agriculture–golf–green spaces project will further anchor the sustainability of AGIRE III (Partner_10) and contribute to ecological sustainability (irrigation with treated wastewater instead of potable water). Several partners (Partners_7, 9, 10) confirmed that the change in the Direction Générale de l'Eau's organisation chart will strengthen the coordination structure. This will also benefit the GIZ successor project's outcome: The resilience of the poor rural population to the variability of water resources has been strengthened.

The AGIRE project brought together all partners in the water sector, strengthening consultation and mutual trust between them (Partner_9). The project actions are considered sustainable and 'irreversible'. They include gender mainstreaming as social sustainability, the success of green spaces as ecological sustainability, etc. (Partner_9). Rainwater collection has been included as an action of the Moroccan water strategy (Partner_7). Furthermore, the project succeeded in establishing sustainable actions such as the draft decree of standards for the reuse of wastewater (ecological stability) and the reformulation of Water Law 36–15 (Partner_9).

However, the partners would have liked to be more integrated into the GIZ team's planning sessions. The predecessor projects AGIRE I and AGIRE II showed that this is possible and has positive results (Partner_8). Clearly, coordination with all ministries concerned with water resources is difficult when interests are different or competences overlap, as found when representatives of these ministries were interviewed. However, there is no way around this and full coordination should be aimed for.

At intermediate level, binding statements (40 partners) for over 10 years exist in participative water resources management contracts (for example, the Declaration of Marrakech that stands for ecological sustainability). Decrees also exist that require committee meetings at least once a year (for example, the 'water basin parliament' in the Declaration of Marrakech). This is a much-valued change in governing the water basin and an innovation in social sustainability. Decrees to strengthen the implementation of these participative water management contracts have been prepared and orientation guidebooks have been drawn up on how to put the decrees into practice.

Partners of GIZ have made farmers aware of the water problem in terms of quantity and quality. Previously, inhabitants had a 'fatalistic' vision. They suffered from the impacts of droughts without acting. Now they are aware of possibilities and opportunities to improve their living environment (Partner_12) and to contribute to their financial stability. They have improved relations with the administration and agreed to install water meters to control their consumption (Other stakeholders_10).

The water sector is often seen as conservative. The tendency to use increasingly digitalised data makes ABHs more attractive (Component C, analysis of satellite images). This will help to retain trained personnel or even attract others. Previously outsourced tasks are now becoming insourced again with the 'reconquest of the hydrological measurement profession' within ABHs (Partners_3, 4), which also saves on costs.

ABHs are interested in entering into contracts with the company that supplies satellite data and analyses for monitoring irrigated areas. This is a strong sign for sustainability. However, due to Covid-19, training sessions in the field could not take place and government entities' commitment to future expenditure has been halted because of drastically falling revenues. This puts Component C at risk in terms of sustainability. ABHs are currently devising strategies that imply less costs so that they can continue with the established services. It was stated that partners at intermediate level are interested in getting more involved in the design of the project in the future, to better plan for achievable outputs and allocate appropriate human resources.

At local level, presidents of farmers' associations have been well trained by the project (Stakeholders_1, 2) and appreciate this training. The question is now how they will transfer the knowledge to their members. A good example of AGIRE's training was observed. One AUEA president changed all irrigation procedures on his farm, to adapt them to what he had learned in the AGIRE workshops. He claims that he has had considerable success with the adaptation. He transformed his farm to serve as a model. It is used as a demonstration site for association members, who apparently make good use of it and discuss experiences of the new method (drip irrigation, Stakeholder_10), which offers better financial sustainability. A similar situation was reported (Other stakeholders_12) in places where agroecology and traditional practices are being newly introduced, based on procedures from some decades ago.

Rainwater harvesting and exemplary recovery of wastewater products are being anchored in the country by concerned institutions. They generate interest and projects or contracts for both water saving mechanisms. For example, rainwater harvesting is being actively used in 11 institutions and documents show that these institutions are already disseminating the approach. Rainwater harvesting is integrated into the curriculum of the National School of Architecture in Marrakech and is part of many workshops and conferences (www.agire-maroc.org).

Project partners ABHs and DRPE are stable organisations with resources and qualified personnel. However, the basin areas of ABHs are huge and presence in the field is still a problem. They do not have the capacity to get very involved at local level. Digital analyses of satellite images of their respective areas support their work and give them a timely and accurate overview at less cost.

Rainwater harvesting is now well anchored in DRPE and ABHs. They have their own specialists or use experts from outside. Funds for rainwater harvesting are available through various national programmes (Partner_8).

The AGIRE website contains a vast, comprehensive library of documents and is valued by many interviewees. It will remain for at least five years (GIZ) but should be updated so that all relevant documents on the components provide the most recent information. Some risks for the sustainability of the results were identified.

- There is still some general reluctance to use treated wastewater for irrigation in agriculture.
- The administration (municipal, provincial and agricultural) is insecure and pushes the responsibility from one office to the other (Compte Rendus de Visite de Terrain, 8 and 15 May 2020; ABH Souss-Massa).
- Guidebooks (for example on green spaces) must be continuously updated. Will the administration do this (Component D)?
- Will the partners and communities continue to use the guidebooks and train users (Component D)?
- The wilaya is responsible for monitoring the execution of participative water resource contracts (Component B). A platform should be established to publish monitoring and evaluation indicators and their achievement (Other stakeholder_3).
- Covid-19 has slowed down the finalisation of many activities. Some important training courses could only be completed as short courses online, for example, regarding handover procedures (Component C) and training on the job (Component E).

Overall, the results are well anchored in the partner structure (scores **45 out of 50 points**).

Sustainability dimension 2: Durability of the results over time

Sustainability dimension 2 examines whether the results of the project are permanent, stable and long-term resilient. The assessment forecasts the durability of the project results. It cannot be predicted whether the economic situation will deteriorate after the current Covid-19 pandemic. This risk could not be influenced or absorbed by the project because it relates to the macroeconomic level outside the project's influence and appeared only in the last four months of the project period.

The evaluation basis is a current analysis of the mechanisms for implementing water resources management, which were established or improved through project support and whose functionality is evident, and an analysis of the plausibility of whether these results are likely to be sustained in the future under the given conditions.

- DRPE: decrees for the new Water Law 36–15
 - The high interest of the DRPE in the project outcome assures future sustainability.
 - A new dynamic for non-conventional water resources (recycling, rainwater and desalination) and the initiation of broad-based awareness campaigns secures support for the results of AGIRE and anchors them strongly.
 - Approaches developed jointly with the AGIRE project are reflected in the new national water plan, particularly in the areas of wastewater recycling, rainwater management and interministerial coordination.
 - An example of a more robust water policy is the envisaged obligation to use treated wastewater for urban green spaces instead of the drinking water that is currently used.
- ABHs: participative water management contracts
 - The AGIRE project made it possible to improve the positioning of ABH in IWRM (Partners_5, 6, 7).
 - The wilaya is responsible for monitoring the execution of the participative agreements (Partners_5, 6, 7) and thus strengthens sustainability.
- The project design with its multi-level approach is favourable for the sustainability of its components.
 - The technical or administrative procedures have been translated into decrees or by-laws. Their sustainability is therefore ensured (Component A). Three draft decrees have not yet been validated.
 - Innovative, exemplary participative water resources management contracts have been signed between farmers' associations and the administration (Component B).
 - Monitoring of land use and agricultural water consumption by satellite images is used to implement the aforementioned participative water resources management contracts. ABHs want to use satellite image software in the future (Component C, danger of finance cuts because of Covid-19).
 - National multipliers launched initiatives that incorporate good rainwater management practices (component D).
 - Wastewater and sanitation products are being recovered, and this process will be continued (Component E). Progress has been made, although the wastewater treatment plant in Tiznit and subsequent irrigation with the treated wastewater was not functioning due to administrative problems at the time of the evaluation team's visit.

Forecast of durability: the results of the project are permanent, stable and long-term resilient (scores **48 out of 50 points**).

Table 14: Rating of OECD/DAC criterion: sustainability

Criterion	Assessment dimension	Score and rating
Sustainability	Prerequisite for ensuring the long-term success of the project: the results are anchored in (partner) structures.	45 out of 50 points
	Forecast of durability: the results of the project are permanent, stable and long-term resilient.	48 out of 50 points
Overall score and rating		Score: 93 out of 100 points Rating: Level 1: highly successful

4.7 Key results and overall rating

The OECD-DAC criteria were reviewed and the results are presented above. The selected three hypotheses and the impact hypothesis were valid. The alternative hypotheses were partly confirmed but did not falsify the main hypotheses.

Table 15: Overall rating of OECD/DAC criteria and assessment dimensions

Criterion	Score	Rating
Relevance	97 out of 100 points	Level 1: highly successful
Effectiveness	89 out of 100 points	Level 2: successful
Impact	93 out of 100 points	Level 1: highly successful
Efficiency	90 out of 100 points	Level 2: successful
Sustainability	93 out of 100 points	Level 1: highly successful
Overall score and rating for all criteria	92 out of 100 points	Level 1: highly successful

Table 16: Rating and score scales

100-point scale (score)	6-level scale (rating)
92–100	Level 1 = highly successful
81–91	Level 2 = successful
67–80	Level 3 = moderately successful
50–66	Level 4 = moderately unsuccessful
30–49	Level 5 = unsuccessful
0–29	Level 6 = highly unsuccessful

5 Conclusions and recommendations

5.1 Factors of success and failure

Factors that contributed to the project success

The long-term engagement and continuity of AGIRE I to AGIRE III has contributed considerably to the success of the project. The project had an objective orientation from the outset as it began with demonstration projects, which were adapted to the context and then scaled up. AGIRE III could build on the strong relationship between earlier projects and partners and continue successfully. AGIRE III brought together all the partners in the water sector. It strengthened consultation and mutual trust between partners by encouraging in-depth consultations with water stakeholders and users. This was underlined by very positive feedback from partners in terms of regulatory and institutional support and expertise.

The multi-level approach with work at micro, meso and macro levels created important synergies between the levels. The emphasis was to work with the users (bottom up), instead of top down. The participative water resources management contracts are an example of this approach. They made a real breakthrough in water basin management and are exemplary for the other water basins.

The project made use of an extensive competence network nationally and internationally and could employ leading consulting firms. Thus it was possible to apply innovative approaches (instead of the classical ones) in almost all the components (citizens' panels, instant and simplified satellite image analysis, guides and tools for rainwater harvesting and sanitation/wastewater reuse).

The strict focus on objectives and transparency in how to reach the goals contributed considerably in terms of regulatory, organisational and technical dimensions and approaches. This influenced partners' ways of working and reaching set objectives.

Some factors hindered the achievement of the project objectives.

- The water sector is divided into ministries (as in many countries) and this slows down the implementation speed, as consensus building is tedious and takes a long time. An example of this was related to irrigation with treated wastewater (Component E). The risk of contamination (by badly treated wastewater) and the diffuse responsibilities between actors made it impossible to achieve this component on time.
- The introduction of new technologies and approaches (for example, satellite images and working at local level) created resistance in the beginning. The project had to work very hard to convince those concerned and develop understanding. A workshop explaining in detail the advantages of using satellite images helped to break the barrier.
- Some activities depended on studies that were delayed and not up to expectations (e.g. unified management control systems).
- The change in the person responsible for the project between AGIRE II and AGIRE III led to some adaptations in approaches and procedures. Time was needed to adjust to these. Many interviewees considered that the project started slowly with many activities left for the last project months. However, this perception does not fit the actual disbursement of funds. Unfortunately, Covid-19 forced a slowdown in project activities and stopped some of them (such as capacity development in face-to-face courses). This was unsatisfactory for indirect target groups.
- It was difficult for some partners to absorb all the project activities because of a lack of personnel.

5.2. Conclusions and recommendations

The key conclusion is that the project team managed to successfully implement the project with the project partners.

Morocco's water sector is characterised by dwindling groundwater and surface water resources, which poses a risk to Morocco's economic and social development. Despite the resource differences between a rainy north and a dry south, the average availability of renewable water resources is currently around 625 m³/capita/year. This value is well below the generally accepted water stress threshold of 1,000 m³/capita/year and will soon be at the threshold of an absolute water shortage of 500 m³/capita/year.

To reduce overuse of water resources, the project promoted participatory development and implementation of measures to stabilise water consumption and mobilise alternative water resources, namely rainwater and treated wastewater. The project has come far in its efforts and this is best demonstrated by the statement of one ABH:

'Without the project, the deficit in our river basin would be 300 million cubic metres, with the implementation of the action plan of the Marrakech declaration, aquifer water balance could be reached in 2030 (Partner_5, 6, 7).'

As the achievement of MOIs is impressive, key recommendations somewhat confirm the successfully implemented project approach. They are targeted to the GIZ team and partners and address the final closure of the project and follow-on projects. They go beyond the evaluation matrix and address the following points.

The GIZ project team to finally close AGIRE III

- **Communication strategy with the outside:** the project's communication strategy with the outside was mainly based on the AGIRE website (www.agire-maroc.org), which was valued by many interviewees. It contains a vast, comprehensive library of documents. However, information must be updated continuously on a website to keep it relevant. This should be done for all components. The latest activities recorded for Components C and E date back to 2017. A blog on current activities and experiences might make the site even more interesting and attractive.
- **Consensus on the final implementation in Tiznit:** the construction of the wastewater treatment plant in Tiznit is finished and it could work, supplying treated wastewater to the farmers (many of them currently irrigate illegally with untreated wastewater). However, the plant is not operating due to minor problems between the parties. Participative approaches have been used in the project successfully (for example, the Declaration of Marrakech). They should also be used (as in this case, where many people are affected) to get all stakeholders on board, show them the facts and possible solutions and obtain their support.

The GIZ project team considering follow-on projects

- **Operational strategy:** many projects experience an accumulation of planned activities at the end of the project period. This happened in AGIRE III. Many interviews pointed out a slow start and consequently high speed at the end. The arrival of the Covid-19 pandemic four months before the project ended forced a slowdown, reduction or even cancellation of final activities. As a result, some indicators were not achieved. Some people's impression was that the project was concluded before benefits were seen. Follow-on projects might therefore have more precise monitoring tools to provide a better overview of implementation versus time. Covid-19 will influence follow-on projects in a partly unpredictable way.
- **Integrating the partners into project planning:** the design of the project strategy (building on previous experiences, matching needs of target groups, a mix of competence and organisational development, project activities supporting each other at different levels of influence) and a competent steering structure contributed to the project's success. Thus, the same strategy should be applied in any follow-on projects. All partners appreciated the work of GIZ and confirmed their good relationship within the AGIRE project. In AGIRE III, GIZ management introduced a new format of meetings among GIZ advisors every two weeks. These were not project planning meetings, but management of the workflow and internal cooperation within the GIZ team. Some had a negative view of this new format. However, the project management considered that this 'new' arrangement was necessary and successful. Project planning meetings were organised jointly with DRPE and ABHs but less frequently than before. To improve the relationship with the ministry, more frequent joint planning sessions might be considered.
- **Involving concerned stakeholders:** the water sector is divided between ministries in most countries, as it is in Morocco. This explains why the Ministry of the Interior voiced its concern about not having been more involved when the project was dealing with sanitation/wastewater issues or the Ministry of Agriculture when agricultural water issues were addressed. Coordination on both sides between partners and GIZ will make interventions in water resources management even more effective and efficient.

Further recommendations for partners and the future

- Integration of more personnel into negotiations.
- Local project partners (in our case ABHs) contribute considerably to the success of a project. It might be good practice to include them as an integral part of the intergovernmental negotiation process by considering their opinion at an early stage.
- Ensuring absorption of achievements: the project governance mechanism should be the subject of a roadmap designed and co-signed by all partners before implementation of the programme. The roadmap should indicate the human resources allocated on both sides (with agreement on planned outputs) and include strategic and monitoring indicators. Focal points in partner institutions must ensure the continuity of development on the given topics by setting up adequate structures. They would benefit from continuous training to master their assigned topic.
- Water stewardship is a set of practices – to be used by businesses, utilities, communities and others – that promotes and fosters the sustainable and equitable management of water resources. Water stewardship helps ensure that water users manage their own risks, seize opportunities related to water (such as ensuring businesses have the water they need in the future to continue production processes) and promote long-term water security for all (www.ceowatermandate.org). This is an industry-driven initiative committed to reducing water stress by 2050. GIZ has an International Water Stewardship Programme, which could contribute valuable information and experience regarding the involvement of big agricultural players into water resources management, for example.
- The World Bank's Decision Tree Framework (Ray and Brown, 2015) provides resource-limited project planners and programme managers with a cost-effective and effort-efficient, scientifically defensible, repeatable and clear method for demonstrating the robustness of a project to climate change. It could be integrated into successor projects to confidently communicate the method by which the vulnerabilities of the project have been assessed, and how the adjustments that were made (if any were necessary) improved the project's feasibility and profitability. The framework adopts a 'bottom-up' approach to risk assessment that aims at a thorough understanding of a project's vulnerabilities to climate change in the context of other non-climate uncertainties (for example, economic, environmental, demographic or political factors).

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Annex: Evaluation matrix

OECD-DAC Criterion RELEVANCE (max. 100 points)							
Assessment dimensions	Filter - Project Type	Evaluation questions	Evaluation indicators	Data collection methods (e.g. interviews, focus group discussions, documents, project/partner monitoring system, workshop, survey, etc.)	Data sources (list of relevant documents, interviews with specific stakeholder categories, specific monitoring data, specific workshop(s), etc.)	Evidence strength (moderate, good, strong)	
<p>The project concept (1) is in line with the relevant strategic reference frameworks.</p> <p>Max. 30 points</p>	Standard	Which strategic reference frameworks exist for the project? (e.g. national strategies incl. national implementation strategy for 2030 agenda, regional and international strategies, sectoral, cross-sectoral change strategies, if bilateral project especially partner strategies, internal analysis frameworks e.g. safeguards and gender (2))	Outcome indicators 1 - 5	Interviews with project team & direct target group, civil society & FMB (GIZ headquarters)	SNE, PNE, Water Law 36-15 & implementing legislation, SNDD, PMV, NDC, SDGs, PNAM, Stratégie d' institutionnalisation de l'intégration du genre dans le secteur de l'eau), PDAIREs en cours d'études, Etude dialogue interministériel; Internet sites of stakeholders. Mutualisation des programmes nationaux d'assainissement • Fiche programme mutualisation VD 06 02 2018.docx • rapport PNE 09-2015-nicht verabschiedet.docx Loi_36-15-sur_leau_offieller-text_fr.pdf - The Study on the development of a concerted and shared SDG 6 monitoring system carried out by GIZ (2019)	The Evaluation Mission assessed the project concept with the National water strategy and sectoral strategies and programs for agriculture, agriculture and sanitation. Evidence Strength was strong,	strong
	Standard	To what extent is the project concept in line with the relevant strategic reference frameworks?	Outcome indicators 1 - 5	Interviews with project team & direct target group, civil society & FMB (GIZ headquarters)	"SNDD, PMV, NDC, SDG, PNAM, Stratégie d' institutionnalisation de l'intégration du genre dans le secteur de l'eau), PNE actualisé, - PDAIREs en cours d'études • Etude dialogue interministériel.	Cross-check results of the desk research, interviews were conducted during Evaluation mission. Evidence Strength was strong,	strong

	Standard	To what extent are the interactions (synergies/trade-offs) of the intervention with other sectors reflected in the project concept – also regarding the sustainability dimensions (ecological, economic and social)?	Outcome indicators 1 - 5	Interviews with project team & direct target group, civil society & FMB (GIZ headquarters)	- doc Wasser perspectives.mars.2018.f.docx - 2016-07-05-PV-Teil-B-PN-2016-2057-5-AGIRE-3 final.docx -2018-03-09_Cartographie-des-acteurs_PN2016.2057.4.pptx " - Rapport CESE (gouvernance des ressources en eau) : disponible sur internet	Research desk and cross-check assessment of results model, interviews were conducted during Evaluation Mission. Evidence Strength was strong,	strong
	Standard	To what extent is the project concept in line with the Development Cooperation (DC) programme (If applicable), the BMZ country strategy and BMZ sectoral concepts?	Outcome indicators 1 - 5	Interviews with project team & FMB (GIZ headquarters) & FMB (GIZ headquarters)	'- 01_Länderstrategie Marokko_in Kraft_09_2015.docx,	the review of the BMZ strategy in Morocco shows consistency with the project concept. Evidence Strength was strong,	strong
	Standard	To what extent is the project concept in line with the (national) objectives of the 2030 agenda? To which Sustainable Development Goals (SDG) is the project supposed to contribute?	Outcome indicators 1 - 5	Interviews with project team & direct target group, donors, civil society, monitoring system & FMB (GIZ headquarters)	- 01_Länderstrategie Marokko_in Kraft_09_2015.docx, Agenda 2030, - Rapport cour compte sur les ODD (publié sur site). - Étude relative à l'élaboration d'un système de suivi de l'ODD 6	Desk research conducted. Respective contribution was discussed during the inception Mission. Findings were cross checked during interviews of Evaluation Mission. Evidence Strength was strong,	strong
	Standard	To what extent is the project concept subsidiary to partner efforts or efforts of other relevant organisations (subsidiarity and complementarity)?	Outcome indicators 1 - 5	Interviews with project team & direct target group, donors, relevant stakeholders, civil society	- 2016-07-05-PV-Teil-B-PN-2016-2057-5-AGIRE-3 final.docx, Groupe thématique de l'eau, 2019-09-23-GIZ-Maroc-Eau_WPL_BF&PT_final.pptx. Projektfortschrittsberichte, Monitoring data	Available documents were assessed during the inception mission. Meeting with project team, interviews and focus group were held with direct target group and other stakeholders. Findings were cross checked	good
	The project concept (1) matches the needs of the target group(s). Max. 30 points	Standard To what extent is the chosen project concept geared to the core problems and needs of the target group(s)?	Outcome indicators 1 - 5	Interviews with project team & direct target group, donors, relevant stakeholders, civil society	Projektfortschrittsberichte, Monitoring data, '- EZ Programmentwurf draft 3.9.2018_fin.docx - 2016-07-05-PV-Teil-B-PN-2016-2057-5-AGIRE-3 final.docx - Loi 36-15 and implementation legislation	Available documents were assessed during the inception mission. Matching needs of target group was discussed during meeting on result logic with project team, interviews and focus group were held with direct target group and other stakeholders. Findings were cross checked during interviews of Evaluation Mission. Evidence Strength was good.	good

	Standard	How are the different perspectives, needs and concerns of women and men represented in the project concept?	Outcome indicators 1 - 5	Interviews with project team & direct target group, donors, relevant stakeholders, civil society	Projektfortschrittsberichte, Monitoring data, '- EZ Programmentwurf draft 3.9.2018_fin.docx - 2016-07-05-PV-Teil-B-PN-2016-2057-5-AGIRE-3 final.docx - Loi 36-15 and implementation legislation,	Available documents were assessed during the inception mission. Matching needs of target group was discussed during meeting on result logic with project team, interviews and focus group were held with direct target group and other stakeholders.	good
	Standard	To what extent was the project concept designed to reach particularly disadvantaged groups (LNOB principle, as foreseen in the Agenda 2030)? How were identified risks and potentials for human rights and gender aspects included into the project concept?	Outcome indicators 1 - 5	Interviews with project team & direct target group, civil society	Projektfortschrittsberichte, Monitoring data, '- Loi 36-15 and implementation legislation, - Agenda 2030, rapport cour compte sur les ODD (publié sur site). - Étude relative à l'élaboration d'un système de suivi de l'ODD 6	Available documents were assessed during the inception mission. Matching needs of target group was discussed during meeting on result logic with project team, interviews and focus group were held with direct target group and other stakeholders. Findings were cross checked during interviews of Evaluation	good
	Standard	To what extent are the intended impacts regarding the target group(s) realistic from today's perspective and the given resources (time, financial, partner capacities)?	Outcome indicators 1 - 5	Interviews with project team & direct target group, donors, civil society	Projektfortschrittsberichte, Monitoring data, Evaluation AGIRE I & II 2016-11-14-AGIRE-phase-III-rapport-mission-pev-version-finale-tb-fa.docx	Available documents were assessed during the inception mission. Matching needs of target group was discussed during meeting on result logic with project team, interviews and focus group were held with direct target group and other stakeholders. Findings were cross checked during interviews of Evaluation Mission. Evidence Strength was good.	good
	Standard	Assessment of current results model and results hypotheses (theory of change, ToC) of actual project logic: - To what extent is the project objective realistic from today's perspective and the given resources (time, financial, partner capacities)? - To what extent are the activities, instruments and outputs adequately designed to achieve the project objective? - To what extent are the underlying results hypotheses of the project plausible? - To what extent is the chosen system boundary (sphere of	Outcome indicators 1 - 5	Interviews with project team & direct target group	-2018-10-30-matrice-de-resultats-AGIRE-Phase-3.docx, Monitoring data - 2019-22-03-compte-rendu-structure- de-pilotage.pdf Projektfortschrittsberichte,	Available documents were assessed during the inception mission. meeting on result logic with project team, interviews and focus group were held with project team and direct target team and other stakeholders. Findings were cross checked during interviews of Evaluation Mission. Evidence Strength was good.	strong
	Standard	To what extent does the strategic orientation of the project address potential changes in its framework conditions?	Outcome indicators 1 - 5	Interviews with project team & direct target group	-2018-10-30-matrice-de-resultats-AGIRE-Phase-3.docx - 2019-22-03-compte-rendu-structure- de-pilotage.pdf Projektfortschrittsberichte	Question was discussed during the inception mission, meetings on evaluation object and context project were held with project team preliminary findings were cross- checked during interviews of	strong
	The project concept (1) is adequately designed to achieve the chosen project objective. Max. 20 points						

<p>The project concept (1) was adapted to changes in line with requirements and re- adapted where applicable.</p> <p>Max. 20 points</p>	Standard	How is/was the complexity of the framework conditions and guidelines handled? How is/was any possible overloading dealt with and strategically focused?	Outcome indicators 1 - 5	Interviews with project team & direct target group	-2018-10-30-matrice-de-resultats-AGIRE-Phase-3.docx - 2019-22-03-compte-rendu-structure- de-pilotage.pdf. Projektfortschrittsberichte	Question was discussed during the inception mission, meetings on evaluation object and context project were held with project team preliminary findings wer cross- cheked during interviews of evaluation mission.	good
	Standard	What changes have occurred during project implementation? (e.g. local, national, international, sectoral, including state of the art of sectoral know-how)?	Outcome indicators 1 - 5	Interviews with project team & direct target group	-2018-10-30-matrice-de-resultats-AGIRE-Phase-3.docx -Historique des changements de budget.docx, Projektfortschrittsberichte, Monitoirng System	Question was discussed during the inception mission, meetings on evaluation object and context project were held with project team preliminary findings wer cross- cheked during interviews of evaluation mission. Evidence strength was good.	good
	Standard	How were the changes dealt with regarding the project concept?	Outcome indicators 1 - 5	Interviews with project team & direct target group	-2018-10-30-matrice-de-resultats-AGIRE-Phase-3.docx -Historique des changements de budget.docx, Projektfortschrittsberichte	Question was discussed during the inception mission, meetings on evaluation object and context project were held with project team preliminary findings wer cross- cheked during interviews of evaluation mission. Evidence strength was good.	good

OECD-DAC Criterion EFFECTIVENESS
(max. 100 points)

Assessment dimensions	Evaluation questions	Evaluation indicators	Data collection methods (e.g. interviews, focus group discussions, documents, project/partner monitoring system, workshop, survey, etc.)	Data sources (list of relevant documents, interviews with specific stakeholder categories, specific monitoring data, specific workshop(s), etc.)	Evidence strength (moderate, good, strong)
The project achieved the objective (outcome) on time in accordance with the project objective indicators.(1) Max. 40 points	To what extent has the agreed project objective (outcome) been achieved (or will be achieved until end of project), measured against the objective indicators? Are additional indicators needed to reflect the project objective adequately?	Outcome indicators 1 - 5	Evaluation dimension 1 Interviews with project team & selected donors & civil society, focus group discussions with direct target group, Project/partner monitoring system,	Project proposal, modification offers, Projektfortschrittsbericht 2019, project monitoring tool, impact monitor, results matrix	Available data sources were screened during the Inception Mission; meetings on project progress and achievements were held with the project team. Interviews were held with donors, direct and indirect target groups and other stakeholders in the evaluation mission and cross-checked wherever possible Evidence strength is good
	To what extent is it foreseeable that unachieved aspects of the project objective will be achieved during the current project term?	Outcome indicators 1 - 5	Evaluation dimension 1 Interviews with project team & direct target group, focus group discussions, Project/partner monitoring system,	Project proposal, modification offers, Projektfortschrittsbericht 2019, project monitoring tool, impact monitor, results matrix, 2019-Plan- Operations	Project was in the last month during inception and soon after closed. Observations of above question apply
The activities and outputs of the project contributed substantially to the project objective achievement (outcome).(1) Max. 30 points	To what extent have the agreed project outputs been achieved (or were achieved until end of project), measured against the output indicators? Are additional indicators needed to reflect the outputs adequately?	Output indicators A-E	Evaluation dimension 2 Interviews with project team & direct target group, focus group discussions, Project/partner monitoring system,	Results matrix, impact monitor, Projektfortschrittsbericht 2019, 2019-Plan- Operations	Available data sources were screened during the Inception Mission; meetings on project progress and achievements were held with the project team. Interviews were held with donors, direct and indirect target groups and other stakeholders in the evaluation mission and cross-checked wherever possible. Evidence strength is good.
	How does the project contribute via activities, instruments and outputs to the achievement of the project objective (outcome)? (contribution- analysis approach)	Outcome indicators 1 - 5	Evaluation dimension 2 Interviews with project team & direct target group, focus group discussions, Project/partner monitoring system,	2016-Angebot, Results matrix, impact monitor, Projektfortschrittsberichte, 2019-Plan-Operations	Hypotheses were developed during the Inception Mission, meetings on project progress & results logic was held with project team, first interviews were held with direct target group; preliminary findings were cross-checked during interviews & focus group discussions of Evaluation Mission.

Implementation strategy: Which factors in the implementation contribute successfully to or hinder the achievement of the project objective? (e.g. external factors, managerial setup of project and company, cooperation management)	Outcome indicators 1 - 5	Evaluation dimension 2 Interviews with project team & direct target group, Project/partner monitoring system,	2016 changement matrice de résultats, Projektfortschrittsberichte, risk monitoring of project	Hypotheses were developed during the Inception Mission, meetings on project progress & results logic was held with project team, first interviews were held with direct target group; preliminary findings were cross-checked during interviews & focus group discussions of Evaluation Mission. Evidence strength is good.	good
What other/alternative factors contributed to the fact that the project objective was achieved or not achieved?	n/a	Evaluation dimension 2 Interviews, Project/partner monitoring system	Projektfortschrittsberichte, workshop reports	Hypotheses were developed during the Inception Mission, meetings on project progress & results logic was held with project team, first interviews were held with direct target group; preliminary findings were cross-checked during interviews & focus group discussions of Evaluation Mission.	
To what extent has the utilisation of digital solutions contributed to the achievement of objectives?		Evaluation dimension 2 Interviews, focus group discussions	Projektfortschrittsberichte, component C	Available data sources were screened during the Inception Mission; meetings on project progress and achievements were held with the project team. Interviews were held with donors, direct and indirect target groups and other stakeholders in the evaluation mission and corss-checked wherever possible. Evidence strength is good.	good
What would have happened without the project?	n/a	Evaluation dimension 2 Interviews, focus group discussions	Projektfortschrittsberichte Interviews and focus groups	Questions were assessed by interviews during the evaluation mission. Evidence strength was good.	

No project- related (unintended) negative results have occurred – and if any negative results occurred the project responded adequately.	Which (unintended) negative or (formally not agreed) positive results does the project produce at output and outcome level and why?	n/a	Evaluation dimension 3 Interviews with direct target group & project team, focus group discussions	Projektfortschrittsberichte	Questions were assessed during the evaluation mission. preliminary findings were cross-checked during interviews & focus group discussions of Evaluation Mission.	
The occurrence of additional (not formally agreed) positive results has been monitored and additional opportunities for further positive results have been seized.	To what extent was the project able to ensure that How were risks and assumptions (see also GIZ Safeguards and Gender system) as well as (unintended) negative results at the output and outcome level assessed in the monitoring system (e.g. 'Kompass')? Were risks already known during the concept phase?	n/a	Evaluation dimension 3 Interviews with project team	Projektfortschrittsberichte Interviews and focus groups	Risks were already known at the beginning (results matrix); preliminary findings were cross-checked during interviews & focus group discussions of Evaluation Mission.	
Max. 30 points	What measures have been taken by the project to counteract the risks and (if applicable) occurred negative results? To what extent were these measures adequate?	n/a	Evaluation dimension 3 Interviews with project team	Projektfortschrittsberichte Interviews and focus groups	Risks were already known at the beginning (results matrix) and monitored. Preliminary findings were cross-checked during interviews & focus group discussions of Evaluation Mission. Evidence strength is good.	
	To what extent were potential (not formally agreed) positive results at outcome level monitored and exploited?	n/a	Evaluation dimension 3 Interviews with project team	Projektfortschrittsberichte	Questions were assessed by interviews during the evaluation mission. Evidence strength moderate.	moderate
Knowledge interest	How successful has the project been in decentralising water management?	Outcome indicator 1-3	Evaluation dimension 3 Interviews with direct target group		Questions were assessed by interviews during the evaluation mission. Evidence strength was good.	good

OECD-DAC Criterion IMPACT (max. 100 points)

Assessment dimensions	Filter - Project Type	Evaluation questions	Evaluation indicators	Data collection methods (e.g. interviews, focus group discussions,	Data sources (list of relevant documents, interviews with specific stakeholder categories,	Evidence strength (moderate, good, strong)	
<p>The intended overarching development results have occurred or are foreseen (plausible reasons). (1)</p> <p>Max. 40 points</p>	Standard	To which overarching development results is the project supposed to contribute (cf. module and programme proposal with indicators/ identifiers if applicable, national strategy for implementing 2030 Agenda, SDGs)? Which of these intended results at the impact level can be observed or are plausible to be achieved in the future?	Outcome indicators 1 - 5	Interviews with project team and direct target group, civil society, focus groups with indirect beneficiaries, site visits	Projektfortschrittsberichte, Monitoring data	Question was discussed in context of meetings on evaluation object and result logic. Preliminary findings were cross-checked during interviews and focus group discussions of evaluation mission. Evidence was strong	strong
	Standard	Indirect target group and 'Leave No One Behind' (LNOB): Is there evidence of results achieved at indirect target group level/specific groups of population? To what extent have targeted marginalised groups (such as women, children, young people, elderly, people with disabilities, indigenous peoples, refugees, IDPs and migrants, people living with HIV/AIDS and the poorest of the poor) been reached?	Outcome indicators 1 - 5	Interviews with project team and direct target group, civil society, focus groups with indirect beneficiaries, site visits	Projektfortschrittsberichte, Monitoring data	Question was discussed in context of meetings on evaluation object and result logic. Preliminary findings were cross-checked during interviews and focus group discussions of evaluation mission. Evidence was strong.	strong
<p>The project objective (outcome) of the project contributed to the occurred or foreseen overarching development results (impact).(1)</p> <p>Max. 30 points</p>	Standard	To what extent is it plausible that the results of the project on outcome level (project objective) contributed or will contribute to the overarching results? (contribution- analysis approach)	Outcome indicators 1 - 5	Interviews with project team and direct target group, FMB (GIZ headquarters)	Projektfortschrittsberichte, Monitoring data	Question was discussed in context of meetings on evaluation object and result logic. Preliminary findings were cross-checked during interviews and focus group	good
	Standard	What are the alternative explanations/factors for the overarching development results observed? (e.g. the activities of other stakeholders, other policies)	Outcome indicators 1 - 5	Interviews with project team and direct target group, FMB (GIZ headquarters)	Projektfortschrittsberichte, Monitoring data, Moroccan Sector strategies: PMV, PNAM, SNDD	Question was discussed in context of meetings on evaluation object and result logic. Preliminary findings were cross-checked during interviews and focus group	good
	Standard	To what extent is the impact of the project positively or negatively influenced by framework conditions, other policy areas, strategies or interests (German ministries, bilateral and multilateral development	Outcome indicators 1 - 5	Interviews with project team and direct target group, FMB (GIZ headquarters)	Projektfortschrittsberichte, Monitoring data, Moroccan Sector strategies: PMV, PNAM, SNDD	Available data sources were assessed during the inception mission. Meeting with project team on project progress and result logic were held	good

		partners)? How did the project react to this?				with the project team, interviews and focus groups were held with direct	
	Standard	What would have happened without the project?	Outcome indicators 1 - 5	nterviews with project team and direct target group, FMB (GIZ)	Projektfortschrittsberichte, Monitoirng data, Moroccoan Sector	Available data sources were assessed during the inception mission.	good
	Standard	To what extent has the project made an active and systematic contribution to widespread impact and were scaling-up mechanisms applied (2)? If not, could there have been potential? Why was the potential not exploited? To what extent has	Outcome indicators 1 - 5	nterviews with project team and direct target group, donors, civil society, FMB (GIZ headquarters)	Projektfortschrittsberichte, Monitoirng data, Moroccoan Sector strategies: PMV, PNAM, SNDD	Question were assessed during the evaluation mission. Evidence Strength was good.	good
<p>No project-related (unintended) negative results at impact level have occurred – and if any negative results occurred the project responded adequately.</p> <p>The occurrence of additional (not formally agreed) positive results at impact level has been monitored and additional opportunities for further positive results have been seized.</p> <p>Max. 30 points</p>	Standard	Which (unintended) negative or (formally not agreed) positive results at impact level can be observed? Are there negative trade- offs between the ecological, economic and social dimensions (according to the three dimensions of sustainability in the Agenda 2030)? Were positive synergies between the three dimensions exploited?	Outcome indicators 1 - 5	nterviews with project team and direct target group, donors, civil society,	Projektfortschrittsberichte, Monitoirng data, Moroccan Agenda 2030	Question were assessed during the evaluation mission. Evidence Strength was good.	good
	Standard	To what extent were risks of (unintended) results at the impact level assessed in the monitoring system (e.g. 'Kompass')? Were risks already known during the planning phase?	Outcome indicators 1 - 5	nterviews with project team and direct target group, donors,	Projektfortschrittsberichte, Monitoirng data,	Available data sources were assessed during the inception mission. Meeting with project team on project progress and result logic	strong
	Standard	What measures have been taken by the project to avoid and counteract the risks/negative results/trade-offs (3)?	Outcome indicators 1 - 5	nterviews with project team and direct target group, donors,	Projektfortschrittsberichte, Monitoirng data,	Question were assessed during the evaluation mission. Evidence Strength was good.	good
	Standard	To what extent have the framework conditions played a role in regard to the negative results ? How did the project react to this?	Outcome indicators 1 - 5	nterviews with project team and direct target group, donors,	Projektfortschrittsberichte, Monitoirng data, SNE, Organigram Water Dept.	Question were assessed during the evaluation mission. Evidence Strength was good.	good

OECD-DAC Criterion EFFICIENCY (max. 100 points)							
Assessment dimensions	Type - Project	Evaluation questions	Evaluation indicators (pilot phase for indicators - only available in German so far)	Data collection methods (e.g. interviews, focus group discussions)	Data sources (list of relevant documents, interviews with specific stakeholder categories, specific monitoring data)	Evidence strength (moderate, good, strong)	
The project's use of resources is appropriate with regard to the outputs achieved. [Production efficiency: Resources/Outputs]	Standard	To what extent are there deviations between the identified costs and the projected costs? What are the reasons for the identified deviation(s)?	Das Vorhaben steuert seine Ressourcen gemäß des geplanten Kostenplans (Kostenzeilen). Nur bei nachvollziehbarer Begründung erfolgen Abweichungen vom Kostenplan.	Interview with project manager	Project proposal, modification offers, cost data, excel sheet assigning working-months of staff per outputs	Projected had no projected costs	good
Max. 70 points							
	Standard	Focus: To what extent could the outputs have been maximised with the same amount of resources and under the same framework	Das Vorhaben reflektiert, ob die vereinbarten Wirkungen mit den vorhandenen Mitteln erreicht werden können.	Interview with project manager	Results matrix, Project proposal, modification offers, cost data, excel sheet assigning working-months of staff per outputs	The Efficiency tool was updated by end of September according to final costs and final results matrix. Expected evidence strength is good	good
	Standard	conditions and with the same or better quality (maximum principle)? (methodological minimum standard: Follow-the-money approach)	Das Vorhaben steuert seine Ressourcen gemäß der geplanten Kosten für die vereinbarten Leistungen (Outputs). Nur bei nachvollziehbarer Begründung erfolgen Abweichungen von den Kosten. Die übergreifenden Kosten des Vorhabens stehen in einem angemessenen Verhältnis zu den Kosten für die Outputs. Die durch ZAS Aufschriebe erbrachten Leistungen haben einen nachvollziehbaren Mehrwert für die Erreichung der Outputs des Vorhabens.	Interview with project manager	Results matrix, Project proposal, modification offers, cost data, excel sheet assigning working-months of staff per outputs	The Efficiency tool was updated by end of September according to final costs and final results matrix. Expected evidence strength is good	good
	Standard		Die übergreifenden Kosten des Vorhabens stehen in einem angemessenen Verhältnis zu den Kosten für die Outputs.	Interview with project manager	Results matrix, Project proposal, modification offers, cost data, excel sheet assigning working-months of staff per outputs	The Efficiency tool was updated by end of September according to final costs and final results matrix. Expected evidence strength is good	good
	Standard		Die durch ZAS Aufschriebe erbrachten Leistungen haben einen nachvollziehbaren Mehrwert für die Erreichung der Outputs des Vorhabens.	Interview with project manager	Results matrix, Project proposal, modification offers, cost data, excel sheet assigning working-months of staff per outputs	The Efficiency tool was updated by end of September according to final costs and final results matrix. Expected evidence strength is good	good

	Standard	Focus: To what extent could outputs have been maximised by reallocating resources between the outputs? (methodological minimum standard: Follow-the-money approach)	Das Vorhaben steuert seine Ressourcen, um andere Outputs schneller/ besser zu erreichen, wenn Outputs erreicht wurden bzw. diese nicht erreicht werden können (Schlussevaluierung).	Interview with project manager	Results matrix, Project proposal, modification offers, cost data, excel sheet assigning working-months of staff per outputs	The Efficiency tool was updated by end of September according to final costs and final results matrix. Expected evidence strength is good	good
			Oder: Das Vorhaben steuert und plant seine Ressourcen, um andere Outputs schneller/ besser zu erreichen, wenn Outputs erreicht wurden bzw. diese nicht erreicht werden können (Zwischenevaluierung).				
	Standard	Were the output/resource ratio and alternatives carefully considered during the design and implementation process – and if so, how? (methodological minimum standard: Follow-the-money approach)	Das im Modulvorschlag vorgeschlagene Instrumentenkonzept konnte hinsichtlich der veranschlagten Kosten in Bezug auf die angestrebten Outputs des Vorhabens gut realisiert werden.	Interview with project manager	Results matrix, Project proposal, modification offers, cost data, excel sheet assigning working-months of staff per outputs	The Efficiency tool was updated by end of September according to final costs and final results matrix. Expected evidence strength is good	good
	Standard		Die im Modulvorschlag vorgeschlagene Partnerkonstellation und die damit verbundenen Interventionsebenen konnte hinsichtlich der veranschlagten Kosten in Bezug auf die angestrebten Outputs des Vorhabens gut realisiert werden.	Interview with project manager	Results matrix, Project proposal, modification offers, cost data, excel sheet assigning working-months of staff per outputs	The Efficiency tool was updated by end of September according to final costs and final results matrix. Expected evidence strength is good	good
	Standard		Der im Modulvorschlag vorgeschlagene thematische Zuschnitte für das Vorhaben konnte hinsichtlich der veranschlagten Kosten in Bezug auf die angestrebten Outputs des Vorhabens gut realisiert werden.	Interview with project manager	Results matrix, Project proposal, modification offers, cost data, excel sheet assigning working-months of staff per outputs	The Efficiency tool was updated by end of September according to final costs and final results matrix. Expected evidence strength is good	good
	Standard		Die im Modulvorschlag beschriebenen Risiken sind hinsichtlich der veranschlagten Kosten in Bezug auf die angestrebten Outputs des Vorhabens gut nachvollziehbar.	Interview with project manager	Results matrix, Project proposal, modification offers, cost data, excel sheet assigning working-months of staff per outputs	The Efficiency tool was updated by end of September according to final costs and final results matrix. Expected evidence strength is good	good
	Standard		Die im Modulvorschlag beschriebene Reichweite des Vorhabens (z.B. Regionen) konnte hinsichtlich der veranschlagten Kosten in Bezug auf die	Interview with project manager	Results matrix, Project proposal, modification offers, cost data, excel sheet assigning working-	The Efficiency tool was updated by end of September according to final costs and final results matrix.	good

			angestrebten Outputs des Vorhabens voll realisiert werden.		months of staff per outputs	Expected evidence strength is good	
	Standard		Der im Modulvorschlag beschriebene Ansatz des Vorhabens hinsichtlich der zu erbringenden Outputs entspricht unter den gegebenen Rahmenbedingungen dem state-of-the-art.	Interview with project manager	Results matrix, Project proposal, modification offers, cost data, excel sheet assigning working-months of staff per outputs	The Efficiency tool was updated by end of September according to final costs and final results matrix. Expected evidence strength is good	good
	Standard	For interim evaluations based on the analysis to date: To what extent are further planned expenditures meaningfully distributed among the targeted outputs?	siehe oben	n/a	n/a	Th evaluation was a final evaluation	good
The project's use of resources is appropriate with regard to achieving the projects objective (outcome). [Allocation efficiency: Resources/Outcome]	Standard	To what extent could the outcome (project objective) have been maximised with the same amount of resources and the same or better quality (maximum principle)?	Das Vorhaben orientiert sich an internen oder externen Vergleichsgrößen, um seine Wirkungen kosteneffizient zu erreichen.	Interview with project manager	Results matrix, Project proposal, modification offers, cost data, excel sheet assigning working-months of staff per outputs	The Efficiency tool was updated by end of September according to final costs and final results matrix. Expected evidence strength is good	good
Max. 30 points	Standard	Were the outcome-resources ratio and alternatives carefully considered during the conception and implementation process – and if so, how? Were any scaling-up options considered?	Das Vorhaben steuert seine Ressourcen zwischen den Outputs, so dass die maximalen Wirkungen im Sinne des Modulziels erreicht werden. (Schlussevaluierung) Oder: Das Vorhaben steuert und plant seine Ressourcen zwischen den Outputs, so dass die maximalen Wirkungen im Sinne des Modulziels erreicht werden. (Zwischenevaluierung)	Interview with project manager	Results matrix, Project proposal, modification offers, cost data, excel sheet assigning working-months of staff per outputs	The Efficiency tool was updated by end of September according to final costs and final results matrix. Expected evidence strength is good	good

Standard		Das im Modulvorschlag vorgeschlagene Instrumentenkonzept konnte hinsichtlich der veranschlagten Kosten in Bezug auf das angestrebte Modulziel des Vorhabens gut realisiert werden.	Interview with project manager	Results matrix, Project proposal, modification offers, cost data, excel sheet assigning working-months of staff per outputs	The Efficiency tool was updated by end of September according to final costs and final results matrix. Expected evidence strength is good	
Standard		Die im Modulvorschlag vorgeschlagene Partnerkonstellation und die damit verbundenen Interventionsebenen konnte hinsichtlich der veranschlagten Kosten in Bezug auf das angestrebte Modulziel des Vorhabens gut realisiert werden.	Interview with project manager	Results matrix, Project proposal, modification offers, cost data, excel sheet assigning working-months of staff per outputs	The Efficiency tool was updated by end of September according to final costs and final results matrix. Expected evidence strength is good	good
Standard		Der im Modulvorschlag vorgeschlagene thematische Zuschnitte für das Vorhaben konnte hinsichtlich der veranschlagten Kosten in Bezug auf das angestrebte Modulziel des Vorhabens gut realisiert werden.	Interview with project manager	Results matrix, Project proposal, modification offers, cost data, excel sheet assigning working-months of staff per outputs	The Efficiency tool was updated by end of September according to final costs and final results matrix. Expected evidence strength is good	good
Standard		Die im Modulvorschlag beschriebenen Risiken sind hinsichtlich der veranschlagten Kosten in Bezug auf das angestrebte Modulziel des Vorhabens gut nachvollziehbar.	Interview with project manager	Results matrix, Project proposal, modification offers, cost data, excel sheet assigning working-months of staff per outputs	The Efficiency tool was updated by end of September according to final costs and final results matrix. Expected evidence strength is good	good
Standard		Die im Modulvorschlag beschriebene Reichweite des Vorhabens (z.B. Regionen) konnte hinsichtlich der	Interview with project manager	Results matrix, Project proposal, modification offers, cost data, excel sheet assigning working-months of staff per outputs	The Efficiency tool was updated by end of September according to final costs and final results matrix. Expected	good

	Standard		veranschlagten Kosten in Bezug auf das angestrebte Modulziel des Vorhabens voll realisiert werden.			evidence strength is good	
			Der im Modulvorschlag beschriebene Ansatz des Vorhabens hinsichtlich des zu erbringenden Modulziels entspricht unter den gegebenen Rahmenbedingungen dem state-of-the-art.	Interview with project manager	Results matrix, Project proposal, modification offers, cost data, excel sheet assigning working-months of staff per outputs	The Efficiency tool was updated by end of September according to final costs and final results matrix. Expected evidence strength is good	good
	Standard	To what extent were more results achieved through cooperation / synergies and/or leverage of more resources, with the help of other	Das Vorhaben unternimmt die notwendigen Schritte, um Synergien mit Interventionen anderer Geber auf der Wirkungsebene vollständig zu realisieren.			The Efficiency tool was updated by end of September according to final costs and final results matrix. Expected evidence strength is good	good
	Standard	ministries, bilateral and multilateral donors and organisations (e.g. co-financing) and/or other GIZ projects? If so, was the relationship between costs and results appropriate or did it even improve efficiency?					
			Wirtschaftlichkeitsverluste durch unzureichende Koordinierung und Komplementarität zu Interventionen anderer Geber werden ausreichend vermieden.			The Efficiency tool was updated by end of September according to final costs and final results matrix. Expected evidence strength is good	good
	Standard		Das Vorhaben unternimmt die notwendigen Schritte, um Synergien innerhalb der deutschen EZ vollständig zu realisieren.			The Efficiency tool was updated by end of September according to final costs and final results matrix. Expected evidence strength is good	good
	Standard		Wirtschaftlichkeitsverluste durch unzureichende Koordinierung und Komplementarität innerhalb der			The Efficiency tool was updated by end of September according to final costs and final results matrix. Expected evidence strength is good	good

	Standard		deutschen EZ werden ausreichend vermieden.				
			Ausweitung der Wirkungen geführt bzw. diese ist zu			The Efficiency tool was updated by end of September according to final	good
	Standard		Durch die Kombifinanzierung sind die übergreifenden Kosten im Verhältnis zu den Gesamtkosten nicht überproportional gestiegen.			The Efficiency tool was updated by end of September according to final costs and final results matrix. Expected evidence strength is good	good
	Standard			Die Partnerbeiträge stehen in einem angemessenen Verhältnis zu den Kosten für die Outputs des Vorhabens.			The Efficiency tool was updated by end of September according to final costs and final results matrix.
Knowledge interest	Standard			Interview with direct		The Efficiency tool was updated by	good
		How has the governance (including the mode of financing) of the project impacted its results?		target group		end of September according to final costs and final results matrix. Expected evidence strength is good	
			Outcome indicators 1 - 5				

OECD-DAC Criterion SUSTAINABILITY (max. 100 points)						
Assessment dimensions	Evaluation questions	Evaluation indicators	Data collection methods (e.g. interviews, focus group discussions, documents, project/partner monitoring system, workshop,	Data sources (list of relevant documents, interviews with specific stakeholder categories,	Evidence strength (moderate, good, strong)	
Prerequisite for ensuring the long-term success of the project: Results are anchored in (partner) structures. Max. 50 points	What has the project done to ensure that the results can be sustained in the medium to long term by the partners themselves?	Outcome indicators 1-5	Evaluation dimension 1: Interviews with project team & direct target group, selected donors, civil society,	Project proposal, modification offers. Evaluation reports AGIRE I & II, Projektfortschrittsberichte	Available data sources were screened during the Inception Mission; meetings on project progress and achievements were held with the project team. Interviews were held with donors, direct and indirect target groups and other stakeholders in the evaluation mission and corss-checked wherever possible. Evidence strength was good	good
	In what way are advisory contents, approaches, methods or concepts of the project anchored/institutionalised in the (partner) system?	Outcome indicators 1-5	Evaluation dimension 1: Interviews with project team & direct target group, selected donors, civil society, Interviews with project team & direct target group, selected donors, civil society,	Projektfortschrittsberichte, financial reports	Available data sources were screened during the Inception Mission; meetings on project progress and achievements were held with the project team. Interviews were held with donors, direct and indirect target groups and other stakeholders in the evaluation mission and corss-checked wherever possible.	good
	To what extent are the results continuously used and/or further developed by the target group and/or implementing partners?	Outcome indicators 1-5	Evaluation dimension 1: Interviews with project team & direct target group, selected donors, civil society, Interviews with project team & direct target group, selected donors, civil society, focus group discussions	Projektfortschrittsberichte, financial reports	Available data sources were screened during the Inception Mission; meetings on project progress and achievements were held with the project team. Interviews were held with donors, direct and indirect target groups and other stakeholders in the evaluation mission and corss-checked wherever possible. Evidence strength was good	good
	To what extent are resources and capacities at the individual, organisational or societal/political level in the partner country available (long-term) to ensure the continuation of the results achieved?	Outcome indicators 1-5	Evaluation dimension 1: Interviews with project team & direct target group, selected donors, civil society, Interviews with project team & direct target group	Projektfortschrittsberichte, financial reports	Available data sources were screened during the Inception Mission; meetings on project progress and achievements were held with the project team. Interviews were held with donors, direct and indirect target groups and other stakeholders in the evaluation mission and corss-checked wherever possible. Evidence strength was good	good
	If no follow-on measure exists: What is the project's exit strategy? How are lessons learnt for partners and GIZ prepared and documented? (18)	Outcome indicators 1-5	Evaluation dimension 1: Interviews with project team & direct target group, selected donors, civil society, Interviews with project team	Projektfortschrittsbericht 2019, project monitoring	Evidence strength was good	good

	To what extent was the project able to ensure that escalating factors/dividers (1) in the context of conflict, fragility and violence have not been strengthened (indirectly) by the project in the long-term? To what extent was the project able to strengthen deescalating factors/connectors (2) in a sustainable way (3)?					
Forecast of durability: Results of the project are permanent, stable and long-term resilient. Max. 50 points	To what extent are the results of the project durable, stable and resilient in the long-term under the given conditions?	Outcome indicators 1-5, SDG 6.5, 6B, 15	Evaluation dimension 2: Interviews with project team & direct target group, selected donors, civil society, focus group discussions	Projektfortschritt sberichte		
	What risks and potentials are emerging for the durability of the results and how likely are these factors to occur? What has the project done to reduce these risks? (19)	Outcome indicators 1-5	Evaluation dimension 2 Interviews with project team & direct target group	Projektfortschritt sberichte	Available data sources were screened during the Inception Mission; meetings on project progress and achievements were held with the project team. Interviews were held with donors, direct and indirect target groups and other stakeholders in the evaluation mission and cross-checked wherever possible. Evidence strength was good	good
	Will the stakeholders fulfil their commitments after the project? (20)	Outcome indicators 1-5	Evaluation dimension 2: Interviews with direct and indirect target group		Available data sources were screened during the Inception Mission; meetings on project progress and achievements were held with the project team. Interviews were held with donors, direct and indirect target groups and other stakeholders in the evaluation mission and cross-checked wherever possible. Evidence strength was good	good
Knowledge interests	What is the impact of COVID19 on the sustainability of certain actions?	Outcome indicators 1-5	Evaluation dimension 2: Interviews with project team & direct target group			
	What lessons have been learned by partners and relevant institutions in the country from the approaches developed in the project?	Outcome indicators 1-5	Evaluation dimension 2: Interviews with direct target group & partners		Available data sources were screened during the Inception Mission; meetings on project progress and achievements were held with the project team. Interviews were held with donors, direct and indirect target groups and other stakeholders in the evaluation mission and cross-checked wherever possible. Evidence strength was good	good

Additional Evaluation Questions

Assessment dimensions	Evaluation questions	Evaluation indicators	Data collection methods (e.g. interviews, focus group discussions, documents, project/partner monitoring system, workshop, survey, etc.)	Data sources (list of relevant documents, interviews with specific stakeholder categories, specific monitoring data, specific workshop(s), etc.)	Evidence strength (moderate, good, strong)
Impact and sustainability (durability) of predecessor project(s)	Which of the intended impact of the predecessor project(s) can (still/now) be observed?	n/a	Desk research	Final reports AGIRE I & II, Evaluation reports	good
	Which of the achieved results (output, outcome) from predecessor project(s) can (still) be observed?	n/a	Interviews with project team & direct target group, selected donors, civil society, focus group discussions	Final reports AGIRE I & II, Evaluation reports	strong
	To what extent are these results of the predecessor project(s) durable, stable and resilient in the long-term under the given conditions?	n/a	Interviews with project team & direct target group, selected donors, civil society, focus group discussions	Final reports AGIRE I & II, Evaluation reports	good
	In what way were results anchored/institutionalised in the (partner) system?	n/a	Interviews with project team & direct target group	Final reports AGIRE I & II, Evaluation reports	good
	How much does the current project build on the predecessor project(s)? Which aspects (including results) were used or integrated in the current project (phase)?	n/a	Interviews with project team & direct target group	Project proposal, modification offers, Final reports AGIRE I & II, Evaluation reports	strong
	How was dealt with changes in the project context (including transition phases between projects/phases)? Which important strategic decisions were made? What were the consequences?	n/a	Interviews with project team & direct target group	Projektfortschrittsberichte, modification offers	good
	Which factors of success and failure can be identified for the predecessor project(s)?	n/a	Interviews with project team & direct target group		good

	Follow-on project (if applicable)	Based on the evaluations results: Are the results model including results hypotheses, the results-oriented monitoring system (WoM), and project indicators plausible and in line with current standards? If applicable, are there any recommendations for improvement?	n/a	Interviews with project team & direct target group	EZ-Programmentwurf 03.01.2020	good	
		(1)					
	Additional evaluation questions	(1)					
		(1)					

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