

Section I: Identification and JP Status

Adaptation to Climate Change to Sustain Jordan's MDG Achievements

Semester: 1-11

Country	Jordan
Thematic Window	Environment and Climatic Change
MDGF Atlas Project	
Program title	Adaptation to Climate Change to Sustain Jordan's MDG Achievements
Report Number	
Reporting Period	1-11
Programme Duration	
Official Starting Date	
Participating UN Organizations	<ul style="list-style-type: none">* FAO* UNDP* UNESCO* WHO
Implementing Partners	<ul style="list-style-type: none">* Ministry of Agriculture (MOA)* Ministry of Education (MoE)* Ministry of Environment and Tourism* Ministry of Health (MOH)* Ministry of Water and Irrigation (MWI)* National Center for Agricultural Research and Extension (NCARE)* Parliament* Water Authority of Jordan (WAJ)* Water supply companies* World Conservation Union (IUCN)* Zarqa Governorate, and local municipalities and communities

Budget Summary

Total Approved Budget

	UNDP	\$873,333.00
WHO	\$1,600,000.00	
UNESCO	\$699,000.00	
FAO	\$827,667.00	
Total	\$4,000,000.00	

Total Amount of Transferred To Date

	UNDP	\$669,916.00
WHO	\$1,108,334.00	
UNESCO	\$536,328.00	
FAO	\$633,109.00	
Total	\$2,947,687.00	

Total Budget Committed To Date

	UNDP	\$45,000.00
WHO	\$880,868.00	
UNESCO	\$81,234.00	
FAO	\$128,800.00	
Total	\$1,135,902.00	

Total Budget Disbursed To Date

	UNDP	\$389,064.00
WHO	\$247,598.00	
UNESCO	\$220,464.00	
FAO	\$330,047.00	
Total	\$1,187,173.00	

Donors

As you can understand, one of the Goals of the MDG-F is to generate interest and attract funding from other donors. In order to be able to report on this goal in 2010, we would require you to advise us if there has been any complementary financing provided in 2010 for each programme as per following example:

Amount in thousands of US\$

Type	Donor	Total	For 2010	For 2011	For 2012
Parallel					
Cost Share					
Counterpart					

DEFINITIONS

1) PARALLEL FINANCING – refers to financing activities related to or complementary to the programme but whose funds are NOT channeled through UN agencies. Example: JAICA decides to finance 10 additional seminars to disseminate the objectives of the programme in additional communities.

2) COST SHARING – refers to financing that is channeled through one or more of the UN agencies executing a particular programme. Example: The Government of Italy gives UNESCO the equivalent of US \$ 200,000 to be spent on activities that expand the reach of planned activities and these funds are channeled through UNESCO.

3) COUNTERPART FUNDS - refers to funds provided by one or several government agencies (in kind or in cash) to expand the reach of the programme. These funds may or may not be channeled through a UN agency. Example: The Ministry of Water donates land to build a pilot 'village water treatment plant' The value of the contribution in kind or the amount of local currency contributed (if in cash) must be recalculated in US \$ and the resulting amount(s) is what is reported in the table above.

Direct Beneficiaries

Indirect Beneficiaries

Section II: JP Progress

1 Narrative on progress, obstacles and contingency Measures

Please provide a brief overall assessment (250 words) of the extent to which the joint programme components are progressing in relation to expected outcomes and outputs, as well as any measures taken for the sustainability of the joint programme during the reporting period. Please, provide examples if relevant. Try to describe facts avoiding interpretations or personal opinions

Progress in outcomes

Outcome 1: Progress is being made towards achieving Outcome 1: sustained access to improved water supply sources despite increased water scarcity induced by climate change through supporting the efforts towards maintain the Percentage of water supply systems meeting requirements of the national drinking water quality standards.

Outcome 2: Progress is made towards achieving outcome 2: Strengthening the adaptive capacity for health protection and food security to climate change under water scarcity conditions through the developed Policies, programmes, and adaptive capacities to manage environmental health and food security issues from the threat posed by climate change under water scarcity conditions. Health vulnerability assessment and national adaptation strategy and plan of action for health protection from climate change is currently under development.

Progress in outputs

Output 1.1: Current status of DWQMS and pertinent legislations has been assessed with stakeholders' consultation. DWQMS is under formulation. Water Safety Plans (WSP) is in stage 2 of 10 in all already selected 5 water supply systems in Urban and Rural areas. They were also selected to compare performance of water companies versus traditional government water directorates. ToT plan and training content have been designed for concerned parties on DWQMS and WSP management and implantation (reference to WHO DWQ Guidelines. Critical laboratory equipment have been procured and installed in MOH water testing labs to secure adequate readiness in the national counterpart responsible for the surveillance function within the new water quality management system.

Impact of implementation of Output 1.1: Increased awareness of the national counterparts to adopt the preventative approach in the Water Quality management and assure top management understanding and commitment. The Role of UN agencies is more appreciated in addressing the national challenges. The program through implementation of output 1.1 enhanced the Capacity development and the utilization of collective knowledge in climate change related programmes.

Output 1.2: Stage I on the review evidence on Minimum Households' Water Security Requirements for Health Protection is in progress till September 2011. This stage will be followed by Generation of evidence- surveys which will lead to the development of national policy and issue legislative policy instruments on securing supply of minimum water requirements for health. This will be a national management tool and will be used as a guide at both regional and global levels.

Impact of implementation of Output 1.2: Provide the evidence on the minimum household water quantity to be supplied to ensure good health. The developed tools and methodologies will serve as a national policy tool and a regional and global guide to be followed.

Output 2.1: Risk assessment inventory on the impact of CC on food security and crop productivity was conducted and the potential constraints (risks) were identified and mechanisms to overcome or alleviate the effect of these constrains were suggested, alternative adaptation measures were identified, tested and selected, (prioritized), adaptation

options and improvements of crop productivity were identified and tested, target stakeholders at all levels (from local to decision-making) were identified; subjects and materials to be promoted were prepared for the different target groups, the RFP to request contracting services for Implementation of Adaptation to Climate Change Pilot measures and interventions will be floated during July 2011.

Impact of output 2.1: Capacities to adapt to CC in the area of food security is strengthened, and model farms for the treated wastewater reuse established for training and demonstration.

Output 2.2: Following consultation with UNESCO and an internal assessment at the MWI, training needs were re-prioritized to include urban water harvesting, flood risk assessment and management, water evaluation and planning, climate change modeling and improving negotiations skills for transboundary water management. Knowledge on climate change modeling concepts was enhanced through capacity development in climate change modeling at the MWI led by experts from the Abdus Salam International Centre for Theoretical Physics at Abdus Salam International Center for Theoretical Physics (ICTP) (UNESCO category II centre) and through a training of selected staff in advanced climate change modeling at the Center in Trieste. The International Center for Water and Environmental Research at Al Balqa Applied University developed by the project is now fully operational and was adopted by the Ministry of Environment as the official training center for environmental impact assessment studies. Capacities and networks of Jordanian water specialists were strengthened through the 6th International Water Association Specialist Conference on Efficient Use and Management of Water "Water Demand Management: Challenges and Opportunities" supported by UNESCO. In coordination with the MDG-F project of the UNESCO Beijing Office and the MWI trainers, of the Chinese Academy for Science were identified to develop capacities in both urban water harvesting, and flood risk assessment for the MWI in October. Further to this, a training on water evaluation and planning system tools with link to MYWAS software and transboundary water management through U.S.-based International Centre for Integrated Water Resources Management (ICIWaRM) was finalized for October. Negotiations with the International Foundation on World Wide Water Education (Project WET) on the use of water education manual to be used in primary education are being finalized through a MoU.

Impact of implementation of Output 2.2: enhanced the institutional capacities of the national counterparts in the management of water resources and adapting for climate change. Through the implementation of output 2.2 the programme supported the government in identifying its training needs and provided required capacity development in the management of water resources and climate change adaptation.

Output 2.3: Discussions with the MOH started in May 2010 and led to redesigning the implementation process of activities pertinent to Output 2.3. Six MOH National Technical Teams and a Technical Coordination Team have been appointed and trained to develop the National Strategy and Plan of Action to Protect Health from Climate Change (relevant to six climate-sensitive health issues). The teams will develop the National Adaptation Strategy over a six-month period starting in June under Agreements for Performance of Work (APW). The National Adaptation Strategy and Plan of Action will include all activities listed under Output 2.3 in the original work plan of the JP document. This devised approach ensures ownership, institutionalization and sustainability of the adaptation processes within the overall work processes in the MOH.

Impact of implementation of Output 2.3: the program got the top management commitment through the formulation of the steering committee. The national technical teams formulated from the senior MoH staff have demonstrated the necessary skills to undertake the assessment. The institutional arrangements are in place and the processes towards the strategy development are underway.

Output 2.4: Direct and indirect impacts of CC on the water quantity and quality in the Zarqa River Basin have been assessed. Socio-economical impacts of CC on water resources assessed, assessment tool for prioritization of all possible adaptation to climate change interventions has been developed and tested. The MoEnv officials trained on tools and methodologies on these aspects for widespread upscaling into other areas of the country. A programme on climate change adaptation developed and submitted to the

MoEnv. Pilot interventions programme is under development for implementation.

Impact of implementation of output 2.4: The capacities to adapt to CC of stakeholder are strengthened in the ZRB and nation wide paving the way towards upscaling for CC adaptation programmes, and establishment of adaptation to CC showcase for training.

Measures taken for the sustainability of the joint programme

Task forces within the relevant government institutions were formed to ensure the ownership and sustainability of the programme's outcomes. Development of the National Strategies, Plans of Action, and programmes in the area of health, environment, IWRM, and food security towards increased adaptation to Climate Change (Output 2.1, 2.3, and 2.4) is carried out by the the implementing partners to ensure sustainability of the outputs and institutionalization of the adaptation processes within the overall work process of these ministries. Establishment of the centre in Al Balqa Applied University will sustain the operation of centre by the university. Build the capacity of the central government (Ministries), local level (governorates and directorates), Academic institutions, civil societies and NGOs, and different stakeholders and groups of the local communities. To foster national ownership, the PMC is now chaired by the Secretary General of the Ministry of Water and Irrigation (MWI). The MWI has in 2010 integrated Climate Change issues into its mandate and created a climate change and environment unit, which among other things will follow up on the activities of the JP.

To help in future upscaling of the JP outcomes the piloting interventions have been designed in cooperation with key stakeholders and implementing partners to cater for the needs of all. The pilot sites will be used as demonstration sites to serve as show cases to insure acceptance and replicability in other locations and areas in the country.

Are there difficulties in the implementation?

Coordination with Government

Coordination within the Government (s)

Management: 1. Activity and output management. 2. Governance/Decision Making 4.Accountability

Joint Programme design

What are the causes of these difficulties?

External to the Joint Programme

Briefly describe the current difficulties the Joint Programme is facing

Initially there was some delay in the coordination with government institutions due to lack of understanding of the complexity of the management arrangements of the JP such as the host ministry and the role of the implementing agencies.

These difficulties are gradually being resolved in part due to better involvement of government institutions in the JP activities.

The JP original design did not take into consideration that some of the activities could have been and implemented jointly rather than carrying out similar activities with different focus areas for each component. One example is the pilot interventions activity.

The design of piloting interventions for WHO, UNDP, and FAO required intensive and iterative consultation among the implementing agencies and partners. Agreeing on the selected sites that satisfy the required criteria (adaptation measures, farms, communities, and safe handling of treated wastewater). the necessity to attain sustainability of the JP outcomes particularly in relation to the some pilot site selection has also consumed a considerable time.

Briefly describe the current external difficulties that delay implementation

Delays for many of the JP activities were inevitable because of: 1) programme experienced start-up delay of at least six month for mobilization before actual implementation 2) unforeseen delays due to changes within the leadership of ministries such as the Ministry of Health which has resulted in the delay of signing agreements for the activities start up.

In addition there was a delay in receiving the authorization for the budget revision of the UNESCO's component from the Project Management Committee and the National Steering committee; the revision was approved at the end of May, 2011 resulting in a three-month delay to start the implementation of the project

Explain the actions that are or will be taken to eliminate or mitigate the difficulties

The CTAs are now meeting at the JP office more frequently. The JP CTAs are present in the JP office two days per week to coordinate and discuss different activities of the JP. To compensate for the delay of implementing WHO's activities, WHO has assigned part of their team to the JP and developed a management plan to compensate for the delay and bring the programme implementation up to schedule. The management plan is under the supervision of the agency's own staff. WHO will also outsource the implementation of JP activities that need special expertise in the field of WSP and vulnerability assessment of direct and indirect health effects of climate change. WHO will bring international experts in the areas of WSP and vulnerability assessment of direct and indirect health effects of climate change to bridge the national knowledge and expertise gap and participate incapacity building.

Regarding coordination with the government, MOPIC, which is the entity responsible for coordination, has resolved the initial issues which emerged in relation to which Ministry would host the programme. The members of the PMC, including those representing the government, are now fully informed of the roles and responsibilities of each other, and this ensures that the scope for conflict and/or duplication of efforts is not likely to occur in the future.

In addition the joint budget and joint advocacy plan developed in collaboration with the UN agencies has strengthened the concept of Joint Programming. The development of this plan has enabled the different partners to acknowledge the significance of acting as one.

The JP team has updated its workplan and developed an improvement plan in a manner that will accelerate the implementation process while maintaining quality of deliverables.

This will be achieved by accelerating the implementation of some activities, combining some activities of many outputs into one consultation, and sharing some activities between more than one consultant.

An updated M&E plan is now also in place especially as related to the indicators list.

In addition the JP team has developed the consolidated work plan that extends to the end of the JP life taking into consideration the delays incurred in 2009. The JP staff will ensure that the compensation for the delays of the first year will not be at the expense of the quality of the outputs and deliverable of the different activities. The quality of outputs will be closely monitored by the components Task forces, the PMC, and the NSC.

Despite of the above mentioned the JP believes that the JP will need an extension of 6 to 9 months. The extension will be needed to finalize the implementation of some activities especially those related to the piloting sites, internalization and institutionalization with the implementing partners systems, and most importantly sustainability of the JP outcomes.

2 Inter-Agency Coordination and Delivering as One

Is the joint programme still in line with the UNDAF?

Yes true

No false

If not, does the joint programme fit the national strategies?

Yes
No

What types of coordination mechanisms

CTAs are continuously meeting in the JP office at the MWI.

All activities of the different outputs are jointly looked to and analyzed by the team.

TORs for all activities are reviewed by all CTAs to insure no duplication of the program activities.

The JP has also developed the Joint Budget for the main office and a Joint Advocacy and communication plan agreed by the CTAs and the PMC and shared by the participating agencies.

The JP is now holding the PMC and the NSC meetings jointly. In addition it is agreed by the NSC that each NSC institution will assign a technical person to attend the PMC meetings.

The NSC has also taken a decision to have heads of participating agencies meeting to better coordinate among them.

Please provide the values for each category of the indicator table below

Indicators	Baseline	Current Value	Means of verification	Collection methods
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<p>Number of managerial practices (financial, procurement, etc) implemented jointly by the UN implementing agencies for MDF-F JPs</p>	<p>27 37</p>	<p>Decision by the of NSC regarding the proposed Joint budget Joint advocacy approved by the PMC and NSC</p> <p>3 RFPs development and approval by the JP CTAs for Output 2.4 supervised by UNDP</p> <p>6RFPs approval by the JP CTAs for Output 1.1, 1.2,and 2.3 supervised by WHO.</p> <p>2 RFPs and two MOU approval by the JP CTAs for Output 2.1 supervised by FAO</p> <p>Conduct Climate change conference through the outputs supervised by UNESCO.</p> <p>Preparation for and conducting the Inception Workshop for launching the JP</p> <p>5 Lender Donor Water group Meetings.</p> <p>20 Stakeholders meetings for all outputs</p>	<p>NSC MOM</p> <p>PMC MOM</p> <p>Release of RFP</p> <p>Link of the conference and Proceeding of the conference</p> <p>JP brochures and media coverage (TV and newspapers)</p> <p>MOM of the Meetings</p>
<p>Number of joint analytical work (studies, diagnostic) undertaken jointly by UN implementing agencies for MDG-F JPs</p> <p>Number of joint missions undertaken jointly by UN implementing agencies for MDG-F JPs</p>	<p>6 15</p>	<p>Joint Awareness visits to 5 universities and 1 visit to the BAU centre</p> <p>3 visits to the UNDP, FAO piloting sites.</p> <p>4 meetings with spanish funded projects working in the area of IWRM, food security and organic farming.</p> <p>2 Preparation meetings for the upcoming showcase workshop of the JP</p>	<p>Scheduled visit</p> <p>MOM</p>

3 Development Effectiveness: Paris Declaration and Accra Agenda for Action

Are Government and other national implementation partners involved in the implementation of activities and the delivery of outputs?

Not involved false
Slightly involved false
Fairly involved false
Fully involved true

In what kind of decisions and activities is the government involved?

Policy/decision making
Management: service provision

Who leads and/or chair the PMC?

The Secretary General (SG) of the Ministry of Water and Irrigation(MWI)is the sole chair of the PMC.

Number of meetings with PMC chair

At least once a week

Is civil society involved in the implementation of activities and the delivery of outputs?

Not involved false
Slightly involved false
Fairly involved false
Fully involved true

In what kind of decisions and activities is the civil society involved?

Policy/decision making
Civil society is represented at the PMC.
IUCN is one NGO that participate in the implementation of the piloting excersize.
Management: service provision
Civil society is represented at the PMC.
IUCN is one NGO that participate in the implementation of the piloting excersize.
Management: other, specify
Civil society is represented at the PMC.
IUCN is one NGO that participate in the implementation of the piloting excersize.

Are the citizens involved in the implementation of activities and the delivery of outputs?

Not involved false

Slightly involved false
Fairly involved true
Fully involved false

In what kind of decisions and activities are the citizens involved?

Policy/decision making

The piloting exercise involves citizens and farmers in the management and maintenance of the pilot site.

The citizens are involved in the selection process and the implementation of adaptation to climate change interventions. This will be insured through reviewing with them the suggested sites and interventions and then selecting the appropriate ones.

They will also be involved in the monitoring and evaluation of these pilot interventions.

Citizens are also invited into all stakeholders meetings and workshops.

Management: service provision

The piloting exercise involves citizens and farmers in the management and maintenance of the pilot site.

The citizens are involved in the selection process and the implementation of adaptation to climate change interventions. This will be insured through reviewing with them the suggested sites and interventions and then selecting the appropriate ones.

They will also be involved in the monitoring and evaluation of these pilot interventions.

Citizens are also invited into all stakeholders meetings and workshops.

Management: other, specify

The piloting exercise involves citizens and farmers in the management and maintenance of the pilot site.

The citizens are involved in the selection process and the implementation of adaptation to climate change interventions. This will be insured through reviewing with them the suggested sites and interventions and then selecting the appropriate ones.

They will also be involved in the monitoring and evaluation of these pilot interventions.

Citizens are also invited into all stakeholders meetings and workshops.

Where is the joint programme management unit seated?

National Government

Current situation

Relevant Civil Society Organisations in Jordan are:

- ¥ Development non-governmental organisations (JES, JSSD, FOE, eCASE, etc.)
 - ¥ Community groups (local cooperative farmer groups in Zarqa areas and the Jordan Valley, Local cooperative groups at different villages, etc.)
 - ¥ Women's organisations, (Jordanian National Commission for Woman, Jordan Women Union, Arab women organization of Jordan)
 - ¥ Faith-based organisations.
 - ¥ Professional associations,(Jordan Engineers Association, Jordan Agricultural engineers, etc.)
 - ¥ Trade unions,(Jordan Chamber of industry and Jordan Chamber of Commerce)
 - ¥ Registered charities (red crescent)
 - ¥ Self-help groups.
 - ¥ Business associations,
 - ¥ Coalitions and advocacy groups (Mercy corps)
- Civil society is represented in the Programme Management Committee by one NGO, Jordan Society for Sustainable Development (JSSD).

JSSD participation will be instrumental in including the interest of Civil Society in the decision making process of the programme. They were invited to the IW and 19 representatives were present in the IW and have actively participated in the discussions.

4 Communication and Advocacy

Has the JP articulated an advocacy & communication strategy that helps advance its policy objectives and development outcomes?

Yes true
No false

Please provide a brief explanation of the objectives, key elements and target audience of this strategy

Key Objectives are:

1. Increased awareness and support for the JP on adaptation to Climate Change in Jordan, MDGs, and the MDG Fund, both at policy and general public level.
2. The JP is leveraged for increased MDG results and citizen engagement in JP activities, MDG-F and MDG processes.
3. Improved accountability and transparency towards all through identifying MDG-F as a trusted partner and Accountability to citizens in pilot areas is strengthened.



Academic institutions 7 consultation and research
Media groups and journalist 5 promotion of JP and awarness
Other

What outreach activities do the programme implement to ensure that local citizens have adequate access to information on the programme and opportunities to actively participate?

Focus groups discussions
Use of local communication mediums such radio, theatre groups, newspapers
Open forum meetings
Capacity building/trainings

Section III: Millenium Development Goals

Millenium Development Goals

Target 7.C: Halve, by 2015, the proportion of people without sustainable access to safe drinking water and basic sanitation

JP Outcome	Beneficiaries	JP Indicator	Value
Sustain access to improved water supply sources despite increased water scarcity induced by climate change	10	1.Increase % of urban households with reliable access to minimum water requirements for health to 75% in the pilot sites. 2.Maintain the current status in the face of additional water stress	5.0

Target 7.D: By 2020, to have achieved a significant improvement in the lives of at least 100 million slum dwellers

JP Outcome	Beneficiaries	JP Indicator	Value
Strengthen adaptive capacity for health protection and food security to climate change under water scarcity conditions.	7	1.Policy options including options for health, for environment, and for food security are developed and submitted along with capacity development needs to government 2.Health vulnerability assessment completed & national strategy and plan of action for health protection from climate change completed	5.0

Additional Narrative Comments

Please provide any relevant information and contributions of the programme to de MDGs, whether at national or local level

Please provide other comments you would like to communicate to the MDG-F Secretariat



Section IV: General Thematic Indicators

1 Environmental and Climate Change policy development and mainstreaming

1.1 Number of sectors or mainstreaming laws, policies or plans supported by the joint programme

1.1.1 On Environmental Management

Policies

National	3
Local	1

Laws

National	
Local	

Plans

National	6
Local	1

1.1.2 On Climate Change

Policies

National	2
Local	1

Laws

National	
Local	

Plan
National
Local

1.2 Please briefly provide some contextual information on the law, policy or plan and the country/municipality where it is (or will be) implemented

Policies

National: Upgrade policies related to health, food security, and water to include climate change issues, and develop guidance on minimum household water requirements to protect human health.

Local: develop a policy frame work for climate change adaptation for the ZRB

Plans

National: Develop a national action plan for health protection from climate change and develop 5 drinking water safety plans.

Local: develop an action plan for adaptation to climate change in the ZRB.

1.3 Sector in which the law(s), policy(ies) or plan(s) is/are focused

Water management
Sustainable management of natural resources
Climate change: adaptation

Comments

1.4 Number of citizens and/or institutions that the law(s), policy(ies) or plan(s) directly affects

All the public management and legal/institutional arrangements serve to the whole nation. Therefore all the efforts within the Joint Programme on laws, strategies, policies and plans will directly affect the whole population of the Country

Citizens

Total	2.5 million
Urban	2.2 million
Rural	0.3 million

National Public Institutions

Total	50
Urban	30
Rural	20

Local Public Institutions

Total	10
Urban	5
Rural	5

Private Sector Institutions

Total	15
Urban	12
Rural	3

1.5 Government budget allocated to environmental issues before the implementation of the Joint Programme

National Budget NA

Total Local Budget(s) NA

Comments

The government is providing in kind contribution in the form of office spaces, and time of its professionals.

1.6 % variation in government budget allocated to environmental policies or programmes**National Budget**

% Overall NA

% Triggered by the joint programme NA

Local Budget

% Overall NA
% Triggered by the Joint Programme NA

Comments

1.7 Government budget allocated to Climate Change before the implementation of the Joint Programme

National budget NA

Total Local Budget(s) NA

Comments

1.8 % variation in government budget allocated to Climate Change from the beginning of the Joint programme to present time

National Budget

% Overall NA
% Triggered by the Joint Programme NA

Local Budget

% Overall NA
% Triggered by the Joint Programme NA

Comments

2 Institutional capacities for environmental management developed and civil society participation increased

2.1 Number of km2 of land newly managed by a natural resource plan supported by the Joint Programme

Total of the area managed in Km2

By habitat (Km2)

Tropical forest
Temperature forest
Savannah
Shrub land
Grassland
Wetlands
Rocky areas
Desert
Sea/oceans
Artificial terrestrial

2.2 Number of institutions, civil servants and citizens trained by the JP to take informed decisions on environmental issues (excluding climate change)

Public institutions

Total 20

Private Sector Institutions

Total 10

NGO/CBO

Total 15

Civil Servants

Total 300
Women 100
Men 200

Citizens

Total 100

Women 30
Men 70

2.3 Number of citizens supported by the JP that have organised themselves to effectively participate in natural resource management initiatives

Total 200
Women 50
Men 150
Ethnic groups

2.4 Number of successful environmental service payment mechanisms that have been promoted by the JP

Total NA
No. of beneficiaries

Sectors of application

Financing source

2.5 Has the JP had an impact on the development of national and local policies or regulations that recognize schemes of Payment for Ecosystem Services as an environmental management tool, How?

NO

3 Climate change adaptation and mitigation and development of institutional capacities

3.1 Number of Km2 and type of habitat covered by mechanisms and/or actions to adapt to climate change (implemented with the support of the joint programme)

The geographical unit that can be used for this question is "River Basin" in the context of MDGF 1680 Joint Programme, and the surface area of Seyhan River Basin is 20,600 km2

Tropical Forest
Temperature Forest
Savannah
Shrub land
Grassland
Wetlands
Rocky Areas
Desert
Artificial terrestrial (pastoral land, arable land, etc.)

3.2 Adaptation measures supported by JP that are addressing the following climate change issues

Land degradation
Soil fertility decrease
Alteration of rain patterns

3.3 Based on available data, what kind of improvements on the population's wellbeing have been achieved through JP supported adaptation measures?

Health
Vulnerability
Improved livelihoods

3.4 Number of individuals and institutions with improved capacities to adapt to climate change or mitigate it

Adaptation

Public institutions

Total 35

Private Sector Institutions

Total 15

Civil Servants

Total 500

Women 200

Men 300

Citizens

Total 500

Women 200

Men 300

3.5 Interventions funded by the JP to improve capacities of individuals and institutions to adapt to Climate Change or mitigate it

Adaptation

Capacity building

Equipment

Knowledge transfer

3.6 Number of clean development mechanism projects registered to mitigate climate change

CO2 emissions captured through conservation

None



CO2 emission reduction through the use of renewable energies
CO2 emission reduction through the use of clean technologies

None
None

Monitoring and Evaluation Plan
Adaptation to Climate Change to Sustain Jordan's MDG Achievement

Expected Results (Outcomes & outputs)	Indicators	Baseline	Overall JP Expected target	Means of verification	Collection methods (with indicative time frame & frequency)	Responsibilities	Risks & assumptions
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Outcome 1: Sustained access to improved water supply sources despite increased water scarcity induced by climate change	Percentage of water supply systems meeting requirements of the national drinking water quality standards	95% (Report on Rapid Assessment of Drinking Water Quality, 2006)	Maintain the current status in the face of additional water stress	Report on Rapid Assessment of Drinking Water Quality 2009-2011	Conduct survey & rapid Assessment of Drinking Water Quality (WHO protocol)	WHO/MOH/MWI	Commitment of national authorities to establish national framework for water safety Risks: Legislative and institutional setup and national resources are not committed by government.
Output 1.1 National drinking water quality management system at central and periphery levels upgraded	1. Drinking water quality (DWQ) systems revised	The current DWQ system is not responsive to expected climate change impacts	Revised DWQ system available MOH network of DWQ laboratories (central and peripheral) upgraded	DWQ system documents Laboratory Equipment and supplies are in place and operational	Review of national standards on Water Quality by PTC Quality monitoring procedures at government laboratories Frequent visits to existing labs Conduct survey	WHO/MOH	Availability of financial resources to upgrade systems beyond the project
	2. No. of water safety plans (WSP) developed	There is one demonstration water safety plan (WSP)	5 WSPs for different sources developed	WSP documents approved by government agencies	Assessment of WSP documents Collected for Mid-term review	WHO/ MOH WAJ	Commitment of governmental agencies Availability of experts in water quality management

Expected Results (Outcomes & outputs)	Indicators	Baseline	Overall JP Expected target	Means of verification	Collection methods (with indicative time frame & frequency)	Responsibilities	Risks & assumptions
	<p>3. No. of male and female staff trained on the upgraded DWQ system</p> <p>4. training courses conducted</p>	Limited and weak capacity currently exists in MOH network	three local institutions staff per target area trained (3 areas)	<p>Logs of attendees of training courses</p> <p>Training materials</p> <p>Feedback report on training courses</p>	Collected for Annual Reports on Capacity Development component. Analysis of feedback on training courses.	WHO/MOH	Cooperation between training institutions and MOH Adoption of DWQ proposed procedures
Output 1.2 Sustainable and reliable supply of minimum water requirements for health protection	Drafted legislative instruments for national policy on minimum water requirements for health submitted to the government	No policy on minimum water requirements for health	Policy on minimum water requirements for health available	Policy document that determines the minimum water requirement	Collected for Mid-term and Final review of project.	WHO/MWI/MOH / WAJ	Willingness of government to develop legislation and policy Conflict between water users (domestic vs. agriculture)

Expected Results (Outcomes & outputs)	Indicators	Baseline	Overall JP Expected target	Means of verification	Collection methods (with indicative time frame & frequency)	Responsibilities	Risks & assumptions
Outcome 2: Strengthened adaptive capacity for health protection and food security to climate change under water scarcity conditions	Policies and adaptive capacities developed to manage environmental health and food security issues from the threat posed by climate change under water scarcity conditions	No policy on adaptation to climate change exists in Jordan	Policy options document	Review through Project Evaluation Minutes of NSC submission of policy options to concerned authorities	Hold a national meeting to launch and announce the national strategy by the end of second year. Policy documents widely disseminated	UNDP UNESCO and FAO	National government have the capacity to develop, implement, and manage the national strategy.
	Health vulnerability assessment, national adaptation strategy and plan of action for health protection from climate change	None existent	Health vulnerability assessment completed & national strategy and plan of action for health protection from climate change is available	Policy document and reports published	WHO regional committee issues resolution on action to protect health from climate change and national government undertakes to implement the resolution	WHO	National government have capacity to implement the WHO Regional Committee resolution
Output 2.1 Improved rural sector adaptive capacity for climate variability and change	An adopted list of adaptation measures to reduce climate change impacts on food productivity	Adaptive mechanisms to reduce impact of CC not existed	Three adaptive mechanisms to reduce the impact of CC adopted	Adaptation plans documents Field reports	Adaptation field tests Collected for Mid-term and Final review of project. Field visits	FAO/MOA/Local Communities	Acceptance of the stakeholder institutions to adopt the mechanisms.

Expected Results (Outcomes & outputs)	Indicators	Baseline	Overall JP Expected target	Means of verification	Collection methods (with indicative time frame & frequency)	Responsibilities	Risks & assumptions
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	Model farms established using treated wastewater	On-farm technical approaches are not existing	3 technical options developed for safe use of treated wastewater in agriculture	Document including the adaptive mechanisms Assessment report Progress reports	Visits to the target area. Conduct Inventory	FAO/MOA/Local communities and farmers	Acceptance of the stakeholder institutions to adopt the mechanisms.
	Tested adaptation measures to improve crop and livestock productivity with treated wastewater irrigation	Policy framework is not available	Three policy options suggested to support the adaptation mechanisms	List of policy options suggested	Collected for Mid-term and Final review of project. .	FAO/MOA	Suggested policies not adopted
	No. of stakeholders trained on the operational approaches	Limited number of trained personnel on the operational approaches	2 persons per stakeholder institution and 1 person per pilot farm to be trained	Feedback report on training programs Training material manuals	Assessment of training conducted. Progress reports	FAO/MOA/Local communities	Willingness and commitment of the stakeholder institutions to participate
Output 2.2 Improved national institutional and community capacity in integrated water resources management (IWRM)	No. Of female and male trained in IWRM	Jordan does not have a well developed IWRM national plan, but has major elements such as a water strategy and policies	100 male and 100 female are trained	Training materials List of institutions trained on IWRM	Assessment of training course feedback report Progress reports approval by PMC	UNESCO/MWI Training institutions	Willingness and commitment of the stakeholder institutions to participate

Expected Results (Outcomes & outputs)	Indicators	Baseline	Overall JP Expected target	Means of verification	Collection methods (with indicative time frame & frequency)	Responsibilities	Risks & assumptions
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	No. of training manual developed on IWRM	No Guidelines and manual on IWRM	No. of manuals on IWRM developed	Curricula that include IWRM concepts Guidelines and Manual of IWRM	Reporting by the education institutions on progress and adoption of curricula	UNESCO/MWI/MOE	Adoption of training material by training institutions and MWI
	Establish environment and water resources center for advocacy education and capacity building.	Center for advocacy, education and capacity building does not exist	Establish environment and water resources center for advocacy education and capacity building.	Document on center mandate Advocacy and awareness strategy document for the center	Collected for Mid-term and final evaluation.	UNESCO/MWI	Financial sustainability of the center. Adoption by MWI as an awareness advocacy arm
	No. Of female and male trained in IWRM	Jordan does not have a well developed IWRM national plan, but has major elements such as a water strategy and policies	100 male and 100 female are trained	Training materials List of institutions trained on IWMR	Assessment of training course feedback report Progress reports approval by PMC	UNESCO/MWI Training institutions	Willingness and commitment of the stakeholder institutions to participate
Output 2.3 Adaptation measures, by health sector and other sectors, to protect health from climate	Gender-based health vulnerability risk assessment and adaptation measures to protect health from climate	There is no national strategy on protecting health from climate change. Institutionalized adaptation interventions not	Sectoral adaptation plans to protect human health from climate change are available One adaptation strategy to protect health from	List of identified gender-disaggregated health risks induced by climate change List of identified	Review of adaptation plans for progress reporting to NSC	WHO/MOH	Adoption of plans by government institutions High cost of adaptation plans

Expected Results (Outcomes & outputs)	Indicators	Baseline	Overall JP Expected target	Means of verification	Collection methods (with indicative time frame & frequency)	Responsibilities	Risks & assumptions
change are institutionalized	change are developed and disseminated within the health sector and other concerned sectors	available at present No national early warning system on health and climate change	negative effects of heat waves developed Assist in establishing a national early warning system on health and climate change	adaptation mechanisms Database Forecast indicators Prediction models	Conduct a test on scenarios and potential responses by the third year		Availability of data as input to the system. Commitment of government agencies to release existing data
Output 2.4 Adaptation capacity of Zarqa River Basin to climate change is piloted and strengthened	Implemented approved strategies for reforming legal, policy and institutional frameworks to include CC adaptation in the water resources management	CC adaptation is not included into water resources management strategies, policies, and institutional framework	One strategy or policy options for water resources management upgraded to include CC adaptation drafted and submitted to GOJ for adoption. One institutional framework for water resources management upgraded to include CC adaptation drafted to GOJ for adoption. Draft and submit Initiatives to have Adaptation to climate change mainstreamed into relevant national action plans and policies	Strategy or policy option draft and submitted to GOJ One institutional framework drafted and submitted to GOJ	Progress reports, MOMs, and the draft policy or strategy and the institutional framework at the end of the JP.	UNDP/MOEnv	Willingness of government to develop legislation and policy Policy options to adaptation to CC adopted by policy makers Commitment of governmental agencies Availability of experts in climate change adaptations Capacity of training institutions. Willingness of local stakeholders

Expected Results (Outcomes & outputs)	Indicators	Baseline	Overall JP Expected target	Means of verification	Collection methods (with indicative time frame & frequency)	Responsibilities	Risks & assumptions
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	Formulated and approved climate change adaptation measures implementation programme and plan for the ZRB	No CC adaptation plan and/or structured programmes for the ZRB available	Climate change adaptation measures implementation programme and plan for the ZRB formulated and approved by the GOJ		MOMs, approved programme and plan	UNDP/MOEnv	Willingness of concerned stakeholders to adopt measures Lack of incentives.
	Piloted adaptation measures by communities in ZRB		At least 2 sites for the implementation of adaptation to CC measures	Documentation on adaptation sites, Field visits reports Progress reports	Conduct field visits. Monitoring and evaluation reports.	UNDP/MOEnv	Willingness of concerned stakeholders to adopt measures Weak cooperation or willingness to participate by key stakeholders Conflict of interest among implementing agencies Lack of incentives.
	Documented and disseminated knowledge about ZRB results		No documented knowledge of CC adaptation structured programmes for the ZRB available	At least 2 successful cases are documented and upscaled or out-scaled	Case studies documentation	Collect case studies and disseminate among stakeholders	UNDP/MOEnv

Annex 1 (Table 2)
Summary of Results framework

UNDAF Outcome 3: Health and Sustainable Environment								
Indicators: Access to water supply sources improved despite the increase in water scarcity induced by climate change.								
JP Outputs	SMART Outputs and Responsible UN Organization	Reference to Agency priority or Country Programme	Implementing Partner	Indicative activities for each Output	Resource allocation and indicative time frame*			
					Y1	Y2	Y3	TOTAL
Joint Programme Outcome 1: Sustained access to improved water supply sources despite increased water scarcity induced by climate change								
<p>Output1.1: National drinking water quality management system at central and periphery level is strengthened</p> <p>Indicators:</p> <p>No. of operational water safety plans resilient to climate change No. of drinking water quality (DWQ) systems upgraded. No. of training courses conducted.</p> <p>Baselines: there are no operational water safety plans the current DWQ system is not responsive to expected climate change impacts Limited and weak capacity</p>	National drinking water quality (DWQ) management system upgraded. WHO	<ul style="list-style-type: none"> WHO/Jordan Country Program 08-09 WHO/CEHA Biennial Programme 08-09 	MOH	<p>1. Upgrade the national drinking water quality (DWQ) system for comprehensive national coverage:</p> <ul style="list-style-type: none"> Review and assess current national DWQ systems including standards, and management practices at both the national and sub regional level and Suggest needed upgrading on the DWQ systems Conduct a stakeholders (decision makers from MOH, MWI, WAJ, legislators, Jordan Institute for Meteorology, water companies, consumer protection associations experts (water treatment and distribution, environmental, hydrologists, etc), research institutions, and NGO's) consultations to map their feedback on the recommended modification on the DWQ systems. Revise the national DWQ standards and management practices (including intensive consultation with different stakeholders). Commission revision of the national DWQ management system based on preventive management and water safety planning. Develop legislation tools governing the management of DWQ system. Introduce the revised DWQ management system 	66979	43614	34268	144861
					4688	3053	2398	10139
	5 operational water safety plans for different sources	<ul style="list-style-type: none"> WHO/Jordan Country Program 08-09 	MOH	2. Develop and implement 5 demonstration water safety plans (3	65421	65421	65421	196263

	developed. WHO	<ul style="list-style-type: none"> WHO/CEHA Biennial Prog. 08-09 		urban & 2 rural) <ul style="list-style-type: none"> Develop technical guidance and manuals on the development of Water Safety Planning. Develop training program packages on WSP. select the 5 demonstration sites for the implementation of the water safety plans (3 urban and 2 rural) Select technical service providers (consultants) to develop the demonstration water safety plans. Conduct stakeholder's workshop. Develop protocols for the implementation of WSP at the selected demonstration sites. Commission technical service providers to develop the water safety plans for the demonstration systems. Train the owners of the five water systems on the on the implementation of the water safety plans Undertake monitoring of the implementation of the WSP at different sites. Revise the water safety protocols manuals, implementation procedures. Disseminate & introduce the revised WSP protocols, manuals, and procedures to all stakeholders. 	4579	4579	4579	13737
	All DWQ management staff of MoH &, WAJ at central and regional levels and 5 water companies staff trained. WHO	<ul style="list-style-type: none"> WHO/Jordan Country Program 08-09 WHO/CEHA Biennial Prog. 08-09 	MOH	3. Design and implement training programme on DWQ management system for all levels <ul style="list-style-type: none"> Undertake training needs assessment for the introduction of the new DWQ management system this would include three levels of professionals namely, decision, managers, and operators. Form concerned stakeholders (MOH, MWI, water companies, water authorities,). Develop and plan the training program. Develop the training modules. Conduct training of trainers programs. Launch training program (at least 9 workshops 3 per sub-region). 	56075	56075	56075	168225
					3925	3925	3925	11775

	Drinking water quality laboratories network of MOH at central and regional levels are upgraded. WHO	<ul style="list-style-type: none"> • WHO/Jordan Country Program 08-09 • WHO/CEHA Biennial Prog. 08-09 	MOH	<p>4. Provide critical supplies and equipment for DWQ laboratory networks of the Ministry of Health:</p> <ul style="list-style-type: none"> • Assess the current capabilities of network of DWQ labs for the Ministry of Health laboratories at the central and governorate level in view of the requirements of the new system. • Identify the critical supplies needed to insure adequate performance according to the new DWQ management system. • Procurement of the supplies to the network of MOH labs. • 	51402	51402	51402	154206
					3598	3598	3598	10794
<p><u>Output 1.2</u> Sustainable and reliable supply of minimum water requirements for health protection is provided to all citizens</p> <p>Indicators: % of urban household with reliable access to minimum water requirement for health under water scarcity conditions induced by climate change. No. of inventories conducted to determine access to water requirements. No. of legislative policy instruments developed</p> <p>Baselines: no policy on minimum water requirements for health in 2004 the percent of urban households with reliable access to</p>	<ul style="list-style-type: none"> ○ Two ecological studies and two epidemiological studies in Amman conducted. ○ An ecological study in 20 rural communities <p>WHO</p>	<ul style="list-style-type: none"> • WHO/Jordan Country Program 08-09 • WHO/CEHA Biennial Prog. 08-09 	MOH	<p>5. Identify minimum household water security requirements for health protection.</p> <ul style="list-style-type: none"> • Review of evidence on water requirement for health both nationally and globally. • Develop methodologies for establishing and generating evidence to support recommendations on minimum water requirements for health. • Convene expert consultations on the development of methods to identify minimum water requirements for health. • Generate evidence on minimum water requirements for health through: <ul style="list-style-type: none"> ○ Conduct two ecological studies, one in Amman another in Ajloun ○ Conduct two epidemiological studies in Amman and Ajloun ○ Conduct ecological studies in at least twenty rural communities • Consolidate the evidence on minimum water requirements for health and generate draft document • Convene a scientific group consultation to review the recommendations and comment on minimum water requirements for health • 	93458	93458	88785	275701
					6542	6542	6215	19299
	National policy on minimum	<ul style="list-style-type: none"> • WHO/Jordan 	MOH	6. Develop national policy and issue	0	18692	32710	51402

minimum water requirements for health was 50%.	water quality requirements for health is issued and necessary supporting documentation for legislation is developed WHO	Country Program 08-09 • WHO/CEHA Biennial Prog. 08-09		legislative policy instruments on securing supply of minimum water requirements for health • Use the scientific evidence on minimum water requirement for health protection to formulate a national policy on minimum water requirement for health protection. • Convene three stakeholders consultations and workshop to build consensus around on the national policy on minimum water requirements for health • (Develop and implement a programme for awareness raising with regards to the amended policies and legislation; •	0	1308	2290	3598
No evidence -based guidance available on minimum water requirement for health								

Outcome 2: Strengthened adaptive capacity for health protection and food security to climate change under water scarcity conditions

Output 2.1 Rural sector adaptive capacity for climate variability and change is improved Indicators: No. of risk assessment studies to identify the impact climate change and water scarcity on food productivity. No. of adaptive mechanisms for reduce the impact of climate change adopted. No. of on-farm technical approaches developed for safe use of treated wastewater in agriculture.	3 risks from climate change and water scarcity on food productivity assessed. FAO	FAO's programme on Climate change.	MOA	7. Assess the risks from climate change and water scarcity on food productivity. Sub activities: • Conduct risk assessment inventory. • Identify the potential constrains (risks). • Suggest mechanisms to overcome or alleviate the effect of these constrains. • Training stakeholders on the suggested mechanisms. • Implement the suggested mechanisms on the pilot site. • Disseminate the information about the most feasible mechanisms	72600	71155	70727	214482
	3 adaptation plans developed. FAO	FAO's programme on Climate change.	MOA	8. Identify and screen adaptation measures to reduce climate change impacts on food productivity: • Identify alternative adaptation measures. • Conduct adaptation measure test. • Select the appropriate measure. • Implement the selected measures on farm. • Up scale and out scale the most suitable and economically sound mechanisms.	41837	42586	0	84423

<p>No. of policy options suggested to support the adaptation mechanisms.</p> <p>No. of stakeholders trained on the operational approaches</p> <p>Baselines:</p> <p>No information available on risk of climate change on food production in Jordan</p>	<p>3 adaptation options tested and operated. FAO</p>	<p>FAO's programme on Climate change.</p>	<p>MOA</p>	<p>9. Identify and test adaptation options and improvements of crop / livestock for increased productivity in irrigating with treated wastewater:</p> <ul style="list-style-type: none"> • Suggest the adaptation options for crop / livestock productivity improvement. • Test the options on-farm. • Select the suitable options. • Develop a legal framework, policy and incentive mechanisms to support these options. • Implement the selected options and disseminate information about the most suitable options. 	<p>50932</p>	<p>101252</p>	<p>0</p>	<p>152184</p>
<p>Adaptive mechanisms to reduce impact of CC not existed</p> <p>On-farm technical approaches are not existing</p> <p>Policy framework is not available</p> <p>Limited number trained personal on the operational approaches</p>	<p>3 awareness campaigns implemented. FAO</p>	<p>FAO's programme on Climate change.</p>	<p>MOA</p>	<p>10. Design and implement community awareness campaign, with focus on women farmers, on climate change adaptation measures.</p> <p>Sub activities:</p> <ul style="list-style-type: none"> • Identify the target stakeholders at all levels (from local to decision-making). • Identify the stakeholder's information needs by conducting assessment meetings (focus group meetings, personal interviews, etc....). • Identify the subjects and prepare the materials to be promoted. • Conduct the local community and policy maker awareness campaign. • Assess the impact of the awareness campaign. 	<p>70620</p>	<p>59826</p>	<p>69657</p>	<p>200103</p>

	5 model farms established. FAO	FAO's programme on Climate change.	MOA	11. Establish model farms using treated wastewater as adaptation to climate change for capacity building (jointly with WHO). Sub activities: <ul style="list-style-type: none"> • Select a suitable farm (according to certain criteria). • Prepare the infrastructure for the farm. • Train the stakeholders on the most appropriate practices for food production including conserve water, increase food production, health related to food production, impact on soil characteristics and introducing of alternative crops. • Design and conduct the experiments and the tests. • Analyze the results and disseminate information about the successful cases. • Create incentive mechanisms for farmers adopting selected adaptation option. 	70727	51574	54174	176475
<p>Output 2.2 National institutional and community capacity in integrated water resources management is improved</p> <p>Indicators: No. of training and capacity building courses conducted.</p> <p>No. of institutions participated.</p> <p>No. of resources management concepts introduce in the</p>	At least 5 training programs developed. UNESCO	<ul style="list-style-type: none"> • UNESCO Jordan-Country programming document (UCPD) • UNESCO Programme and Budget 08-09 • Medium-Term strategy 08-13 World water assessment programme	MWI	12. Design and implement a training programme in integrated water resources management for the Ministry of Water and Irrigation, national NGOs, and stakeholders. <ul style="list-style-type: none"> • This activity will include: • Identification of the target groups at all levels (i.e Local community level, technical level, decision making leveletc). • Assess the stakeholder's information needs. • Asses the existing technical capacity of stakeholders and identify the gaps. • Design the training programs and appoint the trainers. • Conduct the training programs. • Assess the impact of the training programs. 	146010 10990	132990 10010	102300 7372	381300 28372

	<p>Integrated water resources management introduced in the school curriculum from grade 1-11. UNESCO</p>	<ul style="list-style-type: none"> • UNESCO Jordan-Country programming document (UCPD) • UNESCO Programme and Budget 08-09 • Medium-Term strategy 08-13 <p>World water assessment programme</p>	<p>MWI, MoE</p>	<p>15. Develop water education and awareness programme focusing in curriculum, resources manuals, training of trainers and teacher-in-service training for the Ministry of Education with the close partnership of the Ministry of Water and Irrigation.</p> <p>This activity will include the followings:</p> <p>At school level:</p> <ul style="list-style-type: none"> • Develop curriculum and extra curriculum activities in climate change adaptation on school level. • Involved parents and teachers in the activities related to climate change adaptation specially in the pilot project site. <p>At University level:</p> <ul style="list-style-type: none"> • Develop undergraduate courses. • Encourage graduate students to under take post-graduate studies on climate change management and adaptation by providing them with incentives. <p>At local community level:</p> <ul style="list-style-type: none"> • Assess the training needs and knowledge level on adaptation to climate change. • Identify the training and knowledge gap and suggest the proper training and public awareness programs. • Consult the local community about these programs. • Conduct the training and public awareness program in cooperation with the local community institutions. 	<p>41385 3115</p>	<p>36735 2765</p>	<p>0</p>	<p>78120 5880</p>
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	One environmental and water resource centre established. UNESCO	<ul style="list-style-type: none"> UNESCO Jordan-Country programming document (UCPD) UNESCO Programme and Budget 08-09 Medium-Term strategy 08-13 World water assessment programme	MWI	16. Design and establish one environmental and water resource centre for advocacy education and capacity building. This activity will include: <ul style="list-style-type: none"> Identify the mission, aim and the strategy of the center. Suggest the organization chart and the job description of the management and technical staff. Conduct consultation meeting and discuss all the above suggested steps. Establish the center. 	9300 700	7440 560	6510 490	23250 1750
	One cooperative framework Developed. UNESCO	<ul style="list-style-type: none"> UNESCO Jordan-Country programming document (UCPD) UNESCO Programme and Budget 08-09 Medium-Term strategy 08-13 World water assessment programme	MWI	17. Develop a cooperative framework on the criteria for sustainable management of shared water resources including transboundary water resources. This activity includes: <ul style="list-style-type: none"> Review the current management system frameworks and agreements governing shared water resources. Identify gaps (areas of weaknesses in the management systems) and suggest the needed modifications. Conduct stakeholder meeting to discuss the suggested mechanisms and select the most suitable. Develop a new framework and present it to the decision makers. Develop a legal framework to support the suggested management system. 				
Output 2.3 Adaptation measures, by health sector and other sectors, to protect health	National document is published on health vulnerability to climate change	<ul style="list-style-type: none"> WHO/Jordan Country Program 08-09 WHO/CEHA Biennial Prog. 08-09 	MOH	18. Conduct an assessment of direct and indirect risks to health from climate change	74766	46729	18692	140187
					5234	3271	1308	9813

<p>from climate change are institutionalized</p> <p>Indicators: No. of adaptation measures adopted by each sector.</p> <p>No. of sectors adopted the adaptation measures.</p> <p>No. of projects used the adaptation measures.</p>	<p>WHO</p>			<p>This activity will be achieved through:</p> <ul style="list-style-type: none"> Review of health risks from climate change identified worldwide with focus on regions with similar conditions as Jordan Develop protocols, methodologies, and indicators to assess health vulnerability to climate change in Jordan Conduct health vulnerability analysis and prioritize health risks to climate change Dissemination of findings of the health vulnerability assessment to the health sector and other concerned sectors such as water, agriculture, and transport 				
<p>Early warning system to monitor and assess health impacts of climate change established and operated</p> <p>Baseline: no institutionalized adaptation interventions at present</p> <p>There is no national strategy on protecting health from climate change.</p> <p>adaptation projects are not existed</p> <p>There is no national early warning system on health and climate change</p>	<p>A national strategy for health protection from climate change is published</p> <p>WHO</p>	<ul style="list-style-type: none"> WHO/Jordan Country Program 08-09 WHO/CEHA Biennial Prog. 08-09 	<p>MOH</p>	<p>19. Screen and prioritize adaptation strategies, by the health sector and others to protect health from climate change</p> <p>This activity will be achieved through:</p> <ul style="list-style-type: none"> Review of available adaptation strategies to mitigate health risks from climate change Development of adaptation strategies to protect health from identified health risks from climate change in Jordan Integration of the adaptation strategies within the overall strategy of the health sector and other concerned sectors such as water, agriculture, and transport Training of staff on these adaptation strategies Assembling a national board to coordinate the implementation of the adaptation strategies by the health sector and others Dissemination of the adaptation strategies widely to the stakeholders at all levels through workshops, media, NGO's, etc. 	23364	23364	14019	60748
					1636	1636	981	4252
	<p>A national strategy for health protection from heatwaves is implemented</p> <p>WHO</p>	<ul style="list-style-type: none"> WHO/Jordan Country Program 08-09 WHO/CEHA Biennial Prog. 08-09 	<p>MOH</p>	<p>20. Develop and implement adaptation strategies to protect health from the negative effects of heat waves</p>	14019	46729	46729	107477
					981	3271	3271	7523

				<p>This activity will be achieved through:</p> <ul style="list-style-type: none"> • Review of adaptation strategies to protect health from heat waves available worldwide • Develop response strategies to heat waves in Jordan which are classified into two categories: <ul style="list-style-type: none"> a) Health system strategies for curative services: through establishing heat wave treatment facilities in emergency health centers, training of medical staff, and public awareness of first aid procedures for heat waves treatment b) Protective strategies: through working with municipalities to increase shaded areas, and the ministry of labor to alter work schedule for outdoor workers during heat waves. Also work with the Jordan Engineers Association to promote and train engineers on better home design to protect against heat waves, and modification of the code for buildings to cope with the expected heat waves • Design and construction of a model low cost home as an educational facility for better home design to protect from heat waves • Assembly of a meeting for experts the health sector institutions and other concerned parties to review the recommended strategies to protect health from heat waves • Development of a work plan for the implementation of these strategies • Training of staff in the health sector and other concerned sectors on the implementation of these strategies • Dissemination of these adaptation strategies to the public through workshops, media, NGO's, etc. 				
	3 projects for adaptations to protect health from climate change are developed and disseminated to donor	<ul style="list-style-type: none"> • WHO/Jordan Country Program 08-09 • WHO/CEHA Biennial Prog. 08-09 	MOH	21. Design adaptation projects to protect health from identified high risk environmental conditions induced by climate change	9346	37383	14019	60747
					654	2617	981	4253

	agencies. WHO			<p>This will be achieved through</p> <ul style="list-style-type: none"> • Selection of three priority direct or indirect health risks from climate change in Jordan other than heat waves and water scarcity • Design and preparation of project documents, with concerned stakeholders, to protect health from identified risks • Promote these projects to be adopted by the concerned governmental bodies • Arrange and conduct meetings and seminars with donors to raise funds for the implementation of these projects 				
	A national early warning system to monitor and assess health impacts of climate change established. WHO	<ul style="list-style-type: none"> • WHO/Jordan Country Program 08-09 • WHO/CEHA Biennial Prog. 08-09 	MOH	<p>22. Establish a national early warning system to monitor and assess health impacts of climate change</p> <p>This will be achieved through:</p> <ul style="list-style-type: none"> • Construction of a database for internationally reported health impacts as a result of climate change and development of trends or patterns of expected health risks from climate change • Use of models to develop a linkage between locally available data from climate monitoring units and data from units for monitoring health indicators • Establishment of a health forecast unit that issues warnings to health sector institutions and other concerned parties 	14019	84112	37383	135514
					981	5888	2617	9486

<p>Output 2.4 Adaptation capacity of Zarqa River Basin to climate change is piloted and strengthened.</p> <p>Indicators: No. of climate change impact studies on water availability and quality in Zarqa River Basin conducted. No. of opportunities and barriers to adaptation to climate change identified.</p>	<p>At least 4 climate change risks to water availability and quality in Zarqa River Basin identified and assessed. (UNDP)</p>	<p>CP: 3.1. National Institutional and community capacities strengthened for more sustainable management of water resources</p>	<p>MOEnv.</p>	<p>23. Assess direct and indirect climate change risks to water availability and quality in Zarqa River Basin.</p> <ul style="list-style-type: none"> • Review water availability and quality issues in ZRB • Conduct trend analysis for streamflow, groundwater levels, water quality parameters • Construct climate change scenarios • Develop the water availability and water quality model for ZRB • Conduct climate change impact studies on water availability and quality in Zarqa River Basin • Suggest adaptation measures for water availability and water quality • Integrate the proposed adaptation measures in national policies and action plans 	<p>17256</p>	<p>20417</p>	<p>8417</p>	<p>46090</p>
<p>No. of policy options for adaptation to climate change adopted by policy makers.</p> <p>No. of training courses and workshops conducted.</p> <p>No. of local community members participated.</p> <p>No. of farms adopted the adaptation measures.</p> <p>No. of successful cases documented and upscale or outscale.</p> <p>No. of linkages to regional and global experiences established.</p> <p>Baselines: Limited number of cc impact studies on water resources availability and</p>	<p>3 opportunities and 5 barriers to adaptation to climate change risks assessed (UNDP)</p>	<p>CP3.2. Environmental Policies aligned to global conventions and national implementation capacities enhanced</p>	<p>MOEnv.</p>	<p>24. Assess opportunities and barriers to adaptation to climate change risks</p> <ul style="list-style-type: none"> • Review opportunities and barriers to adaptation to climate change risks • Identify opportunities and barriers to adaptation to climate change risks • Assess opportunities and barriers to adaptation to climate change risks • Document opportunities and barriers to adaptation to climate change risks 	<p>30000</p>	<p>57000</p>	<p>0</p>	<p>87000</p>

<p>quality in Zarqa River basin</p> <p>studies on adaptation to climate change are not sufficient</p> <p>No policy options for adaptation to climate change</p> <p>Limited no. of training courses and workshops</p> <p>Little awareness on CC issues within the community</p> <p>None of the farms in Jordan implementing any adaptation measures to climate change</p> <p>Information on national successful cases is not available</p> <p>Knowledge from Zarqa River Basin is not developed. Linkages to regional and global experiences are of non existence</p>	<p>One strategy for legal and institutional frameworks approaches and tools for adaptation to climate change and IWRM in the Zarqa River basin reviewed.(UNDP)</p> <p>The national water policies and action plans for adaptation to climate change reviewed (UNDP)</p>	<p>CP: 3.1. National Institutional and community capacities strengthened for more sustainable management of water resources</p>	<p>MOEnv.</p>	<p>25. Formulate appropriate legal and institutional strategies and the needed interventions (strategy implementation plan) for Zarqa River Basin</p> <ul style="list-style-type: none"> Review legal and institutional framework approaches and tools for adaptation to climate change and IWRM in the Zarqa River basin. Devise a reform strategy for legal and institutional framework approaches and tools for adaptation to climate change and IWRM in the Zarqa River basin. <p>26.Review ongoing national water policies, strategies, and action plans relevant to climate change and IWRM.</p> <ul style="list-style-type: none"> Review national water policy and action plan as well as other related policies Identify gaps in these policies as related to climate change vulnerability and adaptation Propose policy options for adaptation to climate change to be adopted by policy makers Testing the policy options on all levels (local community to decision maker levels) Conduct national workshop to discuss the proposed policy options for adaptation to climate change <p>Integrate policy options related to climate change vulnerability and adaptation in national policies and strategies</p>	<p>25000</p>	<p>100000</p>	<p>25000</p>	<p>150000</p>
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	3 local institutions and 100 individuals participating in the capacity building programme (UNDP)	CP3.2. Environmental Policies aligned to global conventions and national implementation capacities enhanced	MOEnv.	<p>27. Upgrade local and national capacities and capabilities to respond adequately to the needs and requirements for adaptation to climate change and IWRM using effective participatory approaches and tools.</p> <ul style="list-style-type: none"> Review local and national capacities for adaptation to climate change and IWRM Identify gaps and weaknesses in the local and national capacities for adaptation to climate change and IWRM Propose solutions and means to enhance the local and national capacities for adaptation to climate change and IWRM using effective participatory approaches and tools 	25000	30000	13000	68000
			MOEnv.	<p>28. Apply and implement pilot measures and interventions as stipulated in the strategy and implementation plan</p> <ul style="list-style-type: none"> Propose a set of promising pilot measures and interventions Design pilot measures and interventions Select the most economic pilot measure and intervention Implement and apply pilot measure and intervention Evaluate the performance of the pilot measure and intervention Document the gained experiences from implementation of such pilot measure and intervention 	108820	150000	92000	350820

	<p>3 successful cases are documented and upscale or out scale.</p> <p>2 linkages to regional and global experiences established.</p>	<p>CP: 3.1. National Institutional and community capacities strengthened for more sustainable management of water resources</p>	<p>MOEnv.</p>	<p>29. Document , share and disseminate knowledge and transfer technologies generated from Zarqa River basin on the local and national levels, and establish linkages to regional and global experiences</p> <ul style="list-style-type: none"> • Document the knowledge and transfer technologies generated from Zarqa River basin related to climate change and IWRM • Share climate change and IWRM knowledge and transfer technologies generated from Zarqa River basin on the local and national levels • Conduct training courses on topics related to climate change and IWRM • Disseminate climate change and IWRM knowledge and transfer technologies generated from Zarqa River basin on the local and national levels • Establish networks and linkages to regional and global experiences related to climate change and IWRM 	<p>108090</p>	<p>90000</p>	<p>100000</p>	<p>298090</p>
<p>Total</p>					<p>1,407,049</p>	<p>1,632,305</p>	<p>1,087,313</p>	<p>4,126,667</p>