

IMPLEMENTATION OF AN ANDROID APPLICATION TO PROMOTE THE CONCEPT OF INTEGRITY - SONEDE



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WHAT IS THECHALLENGE

- Strengthening integrity by the activation of its principles at SONEDE:
- ✓ Transparency,
- ✓ Accountability,
- ✓ Participation

WHAT DO YOU WANT TO ACHIEVE



- Fight against :
- Vandalisme
- Encroachment on water pipe network's ways
- Corruption: bribe

MAIN CONSTRAINTS

•The necessity to update the database (project SIC)

PEOPLE

SONEDE / Citizen / Partners / **Districts & staff of SONEDE**



PARTNERS

- •GIZ (Gesellschaft für Internationale Zusammenarbeit)
- ACWUA
- SONEDE: IT & communication
- Departments



RESOURCES ALLOCATED

- 12MTND funded by GIZ / SONEDE:
- -IT, Communication & **Quality Departments**

APPROACH

- •Contribution to the development of this application (elaboration of TDR)
- Presentation/dissemination of this application : Media conference (December 2015)









TRANSPARANCY

- Near of you : find a district SONEDE
- Consumption
- Water quality (PH, salinity...)
- Complaints



PARTICIPATION

Report an incident

•Call for tender

•Event

Actuality

Partners

Subsidiaries

ACCOUNTABILITY

- Consumption
- •Water
- caracteristics(PH,salinity...) . Complaints: Lack of
- pressure, water shortage,... •Equipement malfunction

∩₄FIGHT AGAINST CORRUPTION





- •Report a water leak •Act of vandalism on infrastructure
- Act of encroachment on water pipe network's ways Act of corruption (bribe)
- ·Act affecting the quality of water

05 **ETHIC**



informed about the follow up of the complaint

RESULTS

Development of Android Application





- Media conference : Dissemination
- ·Anothers results: Elaboration of a personalized code of ethics for SONEDE

LESSONS LEARNED

- Teamwork
- •This application is a performing tool to insure the integrity and the connection between SONEDE / Citizen
- •Creation of a trust relationship between SONEDE / Citizen: facilitate the access to the information

- Impact assessment and Monitoring of this application on:
- -The rate access in the information
- -The rate of complaint -Capacity- Building for oversight mechanisms











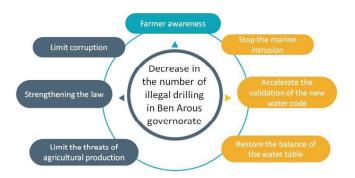


MONITORING OF THE NUMBER OF ILLEGAL BOREHOLES IN THE GOVERNORATE OF BEN AROUS



BEN AHMED Houda Principal engineer Regional Commissariat for Agricultural Development of Ben Arous Email: benahmed_houda@yahoo.fr, tel. +216 97456115

CHALLENGES



APPROACH

Minimize the number of illegal drillings by:

- the awareness and discussions with the farmers based on the organization of meetings with the GDA and the presence of experts to present the critical situation for the water table in terms of available resources and current water quality
- √ the introduction of the principle of participatory management of the aquifer and citizens engagement in decision-making.





RESULTS

Organization of the awareness days on 4th and 5th of June 2016.



 Participation in meetings and trainings concerning water resources management.







 Participation in a training course on participatory management of water bodies, July 2017.



BENEFICIARIES

Users of the aquifers of Ben Arous for:

- ✓ agriculture
- drinking water

PARTNERS

Center for Water Research and Technologies (CERTE)

RESOURCES ALLOCATED

- Regional Commissariat for Agricultural Development of Ben Arous
- KFW: under the project "Integrated water resources management in the irrigated area of Mornag"

LESSONS LEARNED

- The importance for establishing trust between farmers and the public institutions.
- The importance of participatory management of water table for groundwater preservation.

- Creation of an association for the protection of the aquifer composed by the farmers and the public institutions in charge of water management.
- Organization of events during the world water day.
- Results dissemination and awareness activities via the media.





ADVOCACY TO ESTABLISH TECHNICAL DIAGNOSTICS FOR WATER NETWORK MANAGED BY GDAs

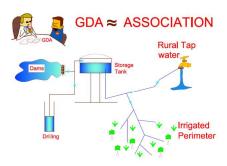


Nejeh Bouguerra, Ing.

Member of the Union Chamber of
Auditors of water systems in Tunisia

Expert Consultant in water management
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WHAT IS A GDA?



There are 2500 GDAs in Tunisia:

- 1400 GDAs manage the irrigated perimeter networks.
- 1100 GDAs manage drinking water supply networks in rural areas.

GDAs manage almost 80 % of Tunisian water resources

PROJECT RELATIONSHIP WITH INTEGRITY

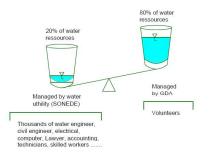


GDA'S MAIN PROBLEM

Lack of technical supervision inducing:

- √ Networks Hydraulic efficiency < 50%
 </p>
- √ Waters Losses estimation: 250 Million Euros / year
- ✓ Dissociation of several GDAs.

WHAT IS THE CHALLENGE



APPROACH

 Advocacy through media, meetings, organization of workshops and by on site technical studies to show practical results.

PARTNERS

- Centre for Water Research and Technologies (CERTE)
- Medias

RESULTS

 Several publications in national journals and in electronic journals about water governance for GDAs and Water uses





RESULTS

Meetings with officials and explanation of the problems
 Meeting with GDAs representatives to raise awareness and assess acceptability of water auditing.





☐ Elaboration of two technical case studies to demonstrate the importance of water auditing and providing technical solutions in the governorate of Nabeul, north of Tunisia.





- Advocating with several NGO's to seek amendment of the Water Code (Workshop took place on 11 December 2015, Gammarth, Tunisia)
- Organization of a meeting on the 26th of July 2017 at the Tunisian National Institute of Agriculture with representatives from the chamber of water auditors, researchers, and civil society in collaboration with CERTE.

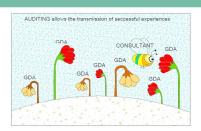






□ Participation to the world water day on « Water and Employment » , the 22nd Mars 2016, to explain the water audit to youth.

VHAT I WANT TO ACHIEVE



APPLICATION OF THE FIRST INTEGRITY PRINCIPLE



WAY FOR WORD

We project to:

- Publish a scientific article in partnership with CERTE scientists
- Coach students final projects
- Advocacy for a study about the situation of GDAs in 3 governorates in Tunisia
- Export this project to other countries in the MENA region

MAIN CONTRAINTS

Lack of responsiveness of target organizations.



CHAMBRE SYNDICALE DES AUDITEURS DES SYSTEMES D'EAU



FOR ONCE !!! IN THE MUNICIPALITY OF ESSOUASSI!! APPLICATION OF THE PARTICIPATORY APPROACH DEFINITION BY CITIZENS OF INTERVENTION FOR THE DRINKING WATER SUPPLY PROGRAMS



Samia LOUSSAIEF
Director of strategies and programmes'
Evaluation and Monitoring
Ministry of Development, Investment
and International Cooperation MDICITunisia

CHALLENGES

Reinforcing the new constitution principles (art 139) by applying Citizen participation approach in the choice of local projects in all municipalities:

- Moving from representative local democracy to participatory democracy: how to involve effectively local citizens in the process of choice of their projects in their municipality?
- How to face lack of transparency? The criteria of choice of drinking water supply
 programs are not predefined for the population in lagging municipalities like Essouassi
- Lack of accountability: Projects are not implemented or with large delay and/or bad quality.
- · Social injustice: the beneficiary areas are not always those of priority.
- Corruption and complacency: those who have power and money have access the first to water service.

APPROACH

- Play the role of facilitator and well prepare the media/communication plan to ensure a good citizen participation in public meetings during the preparation of the PAI 2017) Annual Investment Program.
- Target women and civil society NGO's by an awareness campaign to ensure "gender equality" in public meetings.
- Preparation of the participatory meeting reports and the complete file proving the fulfillment of the minimum conditions required for submission to the State subsidy.
- Organization of meetings with significant participation of citizens and agreement with the municipality to strengthen the media coverage.
- Validation of the study and the participatory approach by the commission of annualized program (CAP) for the rehabilitation of neighborhoods to reduce the disparities in the lagging regions

CONSTRAINTS

- We are facing the same problem in all municipalities and all fields (rarity of financial resources compared to the real needs of citizens for infrastructures and local and urban services).
- When implementing my action plan the main barriers I faced were the resistance of local administration (municipal council) to the participation of local citizens in the process of decision although it is now one of the principles of our new constitution of 2014. Besides I notice that the role of civil society is not well defined and it seems that many representatives of local civil society are attempted to substitute for the citizens role instead of helping them to play their real role in the process of decentralization and facing the challenges of local development.

BENEFICIARIES

 the inhabitants of the district Ezzayatine suffering from regional disparities (number of inhab: 760; housing: 153 including 23 empty houses, budget: 900-mD)

Not connected to water network





IMPLEMENTATION/RESULTS

Actions / Schedule	January	February	March	April	June	March-
	2016	2016	2016	2016	2016	December
						2017
Choice of the pilot municipality					-	
with main partners in the ministry						
of local affairs MLA						
Fixing with the municipal council						
MC and civil society CS, the date of					A	
meeting with the inhabitants of						
the District of intervention					8	ti r
program					TAN	
Media coverage: definition with						
the MC and CS of communication						
tools and information for citizens						
Preparation of the dialogue space:						
fix the place and mobilize the						
logistics for the meeting						
Moderation during the						
meeting/elaboration of meeting		1 1				
reports and the complete file		Aller A	420			
proving the fulfilment of the		200	K 1/4 1			
minimum conditions and gain of						
State subsidy.						
Implementation of the project and						
monitoring and evaluation by						
citizens						
	1					

ACHIEVEMENTS THROUGH MY ACTION PLAN

- More Transparency: selection criteria for the supply of drinking water/ intervention programs are predefined by population.
- · Social Justice: beneficiary areas are those priority
- Less corruption: the participatory approach prevent some rich/powerful people to influence the decision of the municipal council about the site of project.

LESSONS LEARNED

- The involvement of local citizens in the process of decision and the choice of the sites of local development projects and especially drinking water supply guarantees more transparency, social justice and less corruption and then water integrity is enhanced.
- The resistance to any change is the main problem and barrier to any action plan. But <u>perseverance</u> and <u>goodwill</u> are the main success keys. In fact even though we couldn't attract many participants to the 1st meeting of the participatory approach; we used new methods and tools to reach all citizens (potential beneficiaries for the project intervention) and motivate them to attend the 2nd meeting with the participation of women (gender equality).

SCALE UP/WAY FORWARD

- several municipalities who do not apply the participatory approach could not benefit from the grant of the State for the year 2018.
- Several actions must be undertaken in order to improve citizen participation in the choice of development projects and therefore for drinking water supply projects.
- The MDICI has committed several programs and actions in the context of << international cooperation to strengthen the participatory approach (economic and social development plans of stakeholders 2016-2020)
- As a facilitator, I chose another municipality Dar Chaabane El Fehri in order to insure the
 moderation of the zone meeting and so the definition of drinking water supply projects
 in a lagging district within the elaboration of the annual investment program for 2018
 This is my new action plan from October 2017 until March 2018.











Managing the Warehouse of Maythaloun Joint Water and Sanitation Services Council(JSC)

Ahmed Merie', Maythaloun Joint Water and Sanitation Services Council(JSC)

MAYTHALOUN JOINT WATER AND SANITATION SERVICES COUNCIL(ISC)

- Due to the fact that the water warehouse is one of the most important sections in the Council where valuable materials and equipments that needed for the operation and maintenance of the water network. The situation was:
- 1- no record of materials and equipments disclosures was available.
- 2- consumed materials in installation or new subscriptions or maintenance of water networks were not recorded

This situation needs to clarify and improve the responsibility and monitoring of the warehouse material in order to minimize risk of corruption. This will able the JSC to save additional not needed costs, and provide the highest level a clear monitoring about equipments, material and future budgeting planning.

PROBLEMS

- The main problems under this situation are summarized as follows:
- 1. The inability to determine the available quantity of pieces and the shortages in the warehouse.
- The damage or loss (theft) of warehouse equipments, and tools as a result of the personnel use, which leads to the institution to incur additional costs to provide such equipments.
- 3. The inability to determine the cost of maintenance work due to non-registration.
- 4. Delays in the provision of service and maintenance of damaged lines (waste of water) due to lack of parts or equipment required.

ACTION PLAN

Working with the management staff to improve the integrity through the increasing of the efficiency, transparency and accountability through:

- 1- Prepared the needed procedures to follow up the team work and the used equipments.
- 2-Provided a warehouse program and a link with the accounting program.
- 3- Established an administrative system to track the work reports of the technicians containing maintenance complaints and the works that have been carried out.

ISC WAREHOUSE

 The warehouse is one of the most important sections in the Council because it includes materials and equipments that needs for the operation and maintenance in order to ensure the continuity of the services, and the installation of new subscriptions.

Therefore materials, fittings and pipes must be available all the time. Before implementing the action plan, there was no record of materials and equipments disclosures, which leads to miss use of it and could be lead corruption.

In order to improve the situation and to minimize the risks a daily record of used materials, equipment is established, and responsible personal is nominated. This lead to more realistic budgeting and better expectation for future needs.

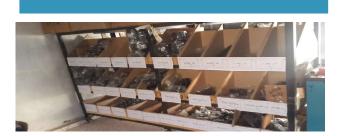












Drilling of Illegal Agricultural Wells in Marj Sanour Watershed/ Palestine

Jamal Muraweh Nairat MariSanour Watershed Association

MARI SANOUR WATERSHED

• Marj Sanour locates in the northern part of West Bank within Jenin governorate. Regarding its topographical and hydrological nature, Marj Sanour watershed forms a unique closed watershed in the West Bank with catchment area of 59 Km², among this are, sixteen thousand donum form a closed surface water lake during winter season. The area consider as one of the most fertile soil in the Palestinian territories. The watershed has nearly a rectangular shape with northwest-southeast elongation; length of Marj Lake from northwest to southeast reaches 5-8 Km of 2-4 Km in width. Historically, few groundwater wells were drilled in the area, and since the second intifada about 25 illegal wells are installed and taped water from the same aquifer, this cause lowering the water table and continues reduction of the yield. In the other hand the over abstraction influence the productivity of other wells locate down stream of the catchment area where millions of USD is invested in agricultural sector.

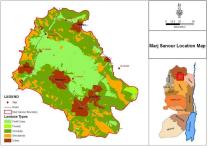
STAKEHOLDERS AGREEMENT

- Due to the drought years witnessed in the region and to the increased groundwater over-pumping from illegal wells drilled in the shallow aquifer (mostly used for agricultural purposes) during the last decades, groundwater levels show a drop of about 70 m during the period between 1969 and 2015. As a result of the water level decline, pumping capacities of the wells was reduced while the water quality deteriorates. This in turn is negatively affecting the agricultural sector.
- Farmers and NGOs are active to develop an artificial recharge capability through the construction of injection wells to improve the water availability in the watershed. In cooperation with the Joint service council, well owners and experts shared views on the local water situation. Data and information, including hydrological maps, water budget and water balance were presented. Risks of drilling illegal wells, divided in categories, and discussed expected future risks and suggested solutions. The meetings were attended by a legal and socio-economic adviser from Palestinian Water Authority, Palestinian Hydrology Group, and by the Ministry of Agriculture. They also agreed that distribution of information about the statues of water resources is the best method to inform farmers about water status in the catchment area, and this will be presented publically on the webpage of the Joint Service council.

ACTION PLAN

- The action plan focus on reducing the number of new illegal wells, where random wells are drilled during the last 15 years. This influence the sustainability of water resources.
 The action plane can divided into:
- One of the main water problem in the area is the illegal wells, where random wells were drilled during the last 15 years and the potential to drill new wells is still possible. This influence negativity the sustainability of groundwater resources.
 The action plane divided into:
- 1- In cooperation with the Joint service council, well owners are invited to presentations about water situation in the area, where data and information are presented in a simple way. Water experts are to join the meeting
- 2- Hydrological maps, water budget and balance are presented
- 3- Categorize the risk of drilling illegal wells is presented, question about the future risk, and suggested solution

 4- Legal and socio-economic adviser from PWA, ministry of agriculture are to participate in the
- 4- Legal and socio-economic adviser from PWA, ministry of agriculture are to participate in the meeting
- 5- Information about the statues of water resources in the area will be present on the Web-page of the Joint Service council.





RESULTS

- 1- During the implementation plan no illegal groundwater wells are drilled within the catchment area. In the other hand, and outside the catchment area boundary additional illegal wells are drilled.
- 2- As a result of the action plan, a unified agreement between the different stakeholders, four stopping the drilling of illegal wells, and to improve the current situation by applying artificial recharge methods, where the Palestinian Hydrology Group with a Netherland donation, constructed several water ponds to store rainwater, and also drilled two artificial recharge wells to inject surface water in the underground, according to this Ministry of Agriculture were rehabilitated hundred of dunom to reduce the surface runoff and increase rainwater infiltration.



FLOODING



RECHARGING





Water is right for everyone contributions system in Water networks.

YOUSEF SALAMEH, Bidya municipality

BIDYA/CONTRIBUTIONS SYSTEM IN WATER NETWORKS

• Bidya:

- Bidya is a growing town ,with a population of about 12,000,It is considered the centre of all surrounding villages and towns, and small commercially and service. It is surrounded by many Israeli settlements, which hinder the lives of citizens and adversely affect the Palestinians in their lives.
- The existing distribution system of Bidya has around 41.8 km of black and galvanized steel pipelines. The system is constructed in the year 2003 and upgraded in two phases; in 2006 and 2017. The steel and galvanized steel pipelines are with diameters ranging between DN75 and DN200 excluding house connections.
- The system requires the contribution of the citizens that the water network passes by their parcels in relative to the area of each parcel where the cost of the network is calculated, then the cost divided among the parcels owners.

BENEFITS OF THE CONTRIBUTION SYSTEM IN WATER NETWORK

- Strengthen the confidence of citizens in the municipality and its performance in this sector through the principle of equal and integrity through having an authenticated documented reference to apply the contributions system.
- Strengthen the internal control to ensure the integrity of the proceedings.
- Raising the efficiency of the municipality in extending networks.

PROBLEMS

The challenge is due to misapplication of the contributions system, because there is no authenticated documented reference to the municipality and the staff to abide, so there will be cronyism and favoritism.

- There is no authenticated and written guidelines in the municipality that determines the percentage of the citizen contributions.
- There is no internal control or supervision over the application of this system.
- Lack of citizens sense of collective responsibility



ACTION PLAN

- The action plan focused to solve the problem by:
 1-Restoring the confidence of the citizens in the municipality and its performance in this sector through implementing the principle of equity.

 2-Strengthening the power of municipality in the management of this section by reduce the cost of
 - 2-Strengthening the power of municipality in the management of this section by reduce the cost of installing networks, because without contribution and agreement with the citizens cause a heavy burden on the municipality and its public budget.
 - 3- Enhance the municipal revenues from the water sector by identify the contribution percentage away from the cronyism. According to this the municipality is able to serve water to all citizens in different places. The end result is an increase of the income of the municipal water sector, and an increase in the subscriptions fees.





Raising Awareness on Water Integrity

Issam Fares Institute - AUB- Women &Water Integrity Training



Challenge

Corruption hinders equitable sharing of water



What do you want to achieve?

Raising awareness on water integrity to trigger action at policy making level by publishing articles in local and regional news websites and journals

Main Constraints

- Editor in Chief was not interested in publishing articles on water
- 2. Looking for another option
- No support



People

Public opinion will push policy makers to hold their responsibilities

Partners

1. Hydropolitics Academy



2. Arab Forum for Environment &Development

المنتـدى العـربي للبيئـة والتنميـة ARAB FORUM FOR ENVIRONMENT AND DEVELOPMENT



Resources Allocated

I did not ask or receive any assistance whether financial or other

Approach

Writing articles on benefits lost due to lack of water integrity





http://www.hidropolitikakademi.org/en/inspiring-storiesfrom-the-mena-region-women-water-integrity.html http://www.afedmag.com/english/mountada-albiadetails.aspx?id=73

http://afedmag.com/web/ala3dadAlSabiaSections-details.aspx?id=2103&issue=&type=4&cat=http://www.aui.ma/en/ar/84-spotlights/3228-inspiring-stories-from-the-mena-region-women-water-integrity.html

Results

Publishing Articles and capacity building

How Sweden seat at Security Council contributes in enhancing Water Diplomacy and Gender equality?

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Lessons Learned

- Sharing experiences of other countries is inspiring
- 2. Changing the publisher

Way Forward

It should be within an institutional strategy not an individual endeavour

Monitoring of Desludging Trips in Aarsal



WHAT IS THE CHALLENGE?

- Integrity Risk
- ☐ Missing information about sanitation system and septic tanks (random pits) in Aarsal area.
- Difficult to control the activities of the contractors.
- Objective:
- Cost reduction of deludging trips in the selected sites in Aarsal by 30% during four months by better monitoring of the "Shawish".

PEOPLE

- · Syrian refugees living in informal settlements in Aarsal.
- · Saving money.



WHAT DO YOU WANT TO ACHIEVE?

- · Reducing the number of deluding trips to save money.
- Saved money will be allocated to purchase additional WASH facilities to refugees.



PARTNERS

- · WASH team including engineers at the organization
- · Data management team
- · WASH committees and community representative "Shawish"
- Municipality
- Donor (UNHCR)
- Other NGOs
- · Beneficiaries and suppliers

MAIN CONSTRAINTS

- · Security issues, Aarsal is a risky area.
- · Approval from my organization.
- · Acceptance from the contractors of the new strategy.

RESOURCES ALLOCATED

- Financial: available
- · Human: WASH team
- Technical: Surveys, information and researches + Data team and engineers.

APPROACH

- · Assessments done about the number and volume of the existing pits and the nearby sites.
- New strategy and schedule of the trips followed by frequent meetings with the suppliers.
- · Involvement of the community in the monitoring.
- . The activity followed up by monitoring tools done by staff
- · GPS devices installed in the trucks for better monitoring.
- · Pilot testing and impact (results)

RESULTS

- The number of desludging trips reduced by about 25% in 4
- · Purchasing of latrines and water tanks by the saved money.





Desludging Truck Removing the Sludge from a Pit

LESSONS LEARNED

- · It was better from the beginning to do frequent meetings with the contractors
- Involvement of the community in the provided services.
- Standardized volume of sanitation pits will ease the work and the schedule of the trips.

- Reduce the frequency of desludging services by constructing big and standardized septic tanks with better technology (like infiltration system)
- Camp management project to organize the informal settlements and mitigate the random refugees' camps.



- · Political: Municipality

South Lebanon Water & Waste Water Est. Integrity Action Plan







WHAT IS THE CHALLENGE?

 What is the problem you are trying to solve? Here state what is the current situation, what is not working, what needs to be changed.

SLWWE's Integrity plan pertain mainly to selection of a small town (Sharhabeel Area), North-East of Saida Coastal City, as a pilot study zone by measuring and estimating the quantity of produced water and comparing it to the quantity of legal subscribers. From the first instances of investigation, our survey team found out that the quantity of produced water (m3/day) is slightly different than the billed water volume, however the financial income revenues collected from the legal subscribers in this pilot zone didn't match the produced water volume, due to the fact that some subscribers were not paying the yearly subscription fees, resorting to illegitimate connection to the water network, and still have a full active water service.

So basically the main challenge was to provide a balance between the billed water volume and the actual produced water volume.

WHAT DO YOU WANT TO ACHIEVE?

change/answer/solution proposed to solve the situation

After several meetings we decided to create a team of 3

a weekly inspection to the pilot zone, and cut off water

connections for those subscribers that are not paying for

the service, as well as organize a report that summarizes

employees from 3 different departments that will conduct

· What is the Action Plan solution? What is the

the plot number and subscriber's name.

mentioned above

PEOPLE

- Beneficiaries (people benefiting from the action plan outcomes):
 - 1- All legal Subscribers who are using the public water. 2- Employees at SLWWE
- Benefits of the Action Plan:
- 1- Equity among citizens, i.e., removal of illegal connections will compel violators to seek for a legal subscription, the legal Subscriber will witness justice imposed by SLWE which will incite him to pay the yearly subscription and will incite new Settlers to Subscribe, hence rendering the number of illegal subscribers who don't pay the water Subscription fees lower for the exact same service the Establishment provide.
- 2- Noticeable increase in billing rate and enhancement of financial income pertaining to this pilot area. The collection for the year 2017 related to the pilot zone was found to be higher than the year 2016 in term of financial income.

APPROACH

How is the Action Plan solving the challenge?

The action plan is forcing illegal subscribers to pay the water bills, also its providing new subscribers to the water network.

- What activities were done?
- 1- Weekly inspections to the pilot zone.
- 2- Monthly assessments for the action plan.

	2015	2016	2017
New Water Subscribers		169	128
Water Bill Revenues (%)	80%	80%	<u>86%</u>
Quantity of Produced Water (Cubic Meter per Day)	-	1,560	1,560
Billed Water Volume (Cubic Meter per Day)	1,205	1,310	1,472
Number of Illegal Records	0	0	16



RESULTS

How is the Action Plan solving the challenge?

The tangible progress to be considered is mainly a slight increase in financial revenue for this area. The collection for the year 2017 related to the pilot zone appears to be higher than the year 2016 money revenue.

· What activities were done?

Other than the weekly inspections that were done on the different building in the pilot zone. We monitored the progress of the action plan in two ways.

First way was by continuously checking if the cut off subscriber has paid the subscription.

Second way was by comparing the previous collection rates (2015 & 2016) with the current year 2017. Both way were done in coordination with the accounting department at SLWWE

LESSONS LEARNED

- Lesson learned 1: Participation, Teamwork and coordination between different departments at SLWWE and the synergy it created, led to promising outcomes/results, not only for this Project, but in the various fields of Work.
- Lesson learned 2: When developing an action plan on water integrity it's very important to focus on the approach to any issue. Sometimes it's not a matter of corruption or dishonesty. In some cases it's a matter of careless people who unintentionally tend to neglect doing proper work, or their vested duties.

MAIN CONSTRAINTS

 What were the main constraints when implementing your action plan?

From institutional point of view, there was no constraints in the implementation of the action plan.

Was everything smooth? Did you face any resistances?

We had some impediments, mainly related to the following: 1- The non-organized and messed up water connections inside buildings, the problem in identifying to which subscriber the connection belong to.

2- In some cases the interference of water connections with electrical cables inside buildings, contributed to a lifethreatening hazard.

3- In some other cases the "water connections room/enclosure" inside several buildings was locked up by the residents, so we couldn't have access.

PARTNERS

 What were the partner's organization with whom you collaborated to have this action plan implemented?

Issam Fares Institute for Public Policy & Int. Affairs at the American University of Beirut.

 Please name if you collaborated with any Government offices, or Ministries, or civil society organizations, or universities, etc. to implement your action plan.

We had some contact in advance with the local authorities (Municipality and Representatives of the local community. where we notified them of the campaign for removal of illegal connections in this area

RESOURCES ALLOCATED

· What was the budget?

Modest, constituted by time dedication of the survey team and some cost pertaining to transportation or additional working

- What were the resources allocated (human, financial, operational
- 1- Three Employees forming the survey team were actively involved in the implementation of the plan by visiting the pilot zone once per week.
- 2- The Operational resources were two cars being used in the inspection, and few small tools beings used by the labor to cut of illegal water pipes and perform the sealing.

- Next Step 1: Finalize the pilot zone, follow-up with Legal Department at SLWWE on the Legal process to prosecute the recurrent infringement, as well as recommending to the decision makers at SLWWE (DG & Establishment's Board) to sustain the achievement by forming a permanent dedicated team to follow and sustain the process, by issuing Notices for the caught infractions and notifying the Legal Dept. to pursue the judicial course in case of continual non-conformity or recurrence (Law enforcement).
- Next step 2: Start applying this action plan on different towns and cities starting with the ones who have substantial unbalance between annual water revenues and the quantity of produced
- Next Step 3: this practice can some how be replicated to the other water establishments in Lebanon, by forming teams for various areas and zones and daily or weekly inspections of the target zones/areas, following a well established protocol and mode of Action

INTERNAL PROCEDURE TO PROCESS APPLICATIONS OF HILL LAKES SELECTION AND REPORTING

WHAT IS THE CHALLENGE?

Current procedure to process the Application does not include:

environment, and it could cause important damage to the surrounded

WHAT DO YOU WANT TO ACHIEVE?

The plan is to propose a procedure including

- Register to track the application at its various stages and provide e applicants with feedback when needed

MAIN CONTRAINTS

PEOPLE

PARTNERS

RESOURCES ALLOCATED

Communication skills

APPROACH

list the criteria used and identify any missing

nformation and/or document could be helpful

4- study old files that were problematic and see how/if any issue could have been avoided by requesting the appropriate information/document

8- discuss and justify with supervisors using real cases from old

9- finalize form and submit for approval with all justification

	Done	Accepted	Adopted
Proposing internal procedures			Not yet
Form of application	yes	yes	yes
Registration of application		yes	
Screening of application	yes		yes
Statistics	Not yet		

RESULTS

The form and register were developed , discussed with the supervisor and

Form of the old application

طلب إنشاء بركة تراه

The new application is under implementation

طلب إنشاء بركة جبلية

LESSONS LEARNED

Affording new Technical information

WAY FORWORD

Test the currently introduced form and registi

Improve where needed

Issue statistics to prove the benefits and win new internal partners to improve on other procedures

Complete any missing

Eng.Valia Faraj Eid Civil and Hydraulic Engineer **Green Plan - Ministry of Agriculture LEBANON**





Promotion de l'irrigation goutte à goutte par des panneaux solaires



Ilham Maaraji

Université Hassan II, Faculté des Lettres et des Sciences Humaines, Mohammedia , Maroc

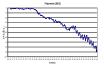


LE DEFI

Le village de Ksyer, Province d'El Hajeb, est un modèle pour les villages marocains actifs dans l'activité agricole et se distingue par la richesse de ses ressources naturelles.

Cependant, l'exploitation des eaux par le forage des puits, parfois illégaux, et le déclin des précipitations pluviales ont contribué à la baisse du niveau de la nappe phréatique de Fès-Meknès.

Les sources naturels ont également connus un déclin.



Evolution piézométrique de la nappe profonde de Fès-Meknès

LES OBJECTIFS

- Profiter de l'eau pour tous et assurer sa pérennité en intégrant l'approche intégrité.
- Assurer l'accès aux points d'eau dans les champs et les maisons de manière équitable.
- $\hfill \square$ Utilisation rationnelle de l'eau par l'irrigation localisée.
- Réduire le coût de production élevé dû à l'utilisation de grandes quantités de butane.
- Inciter les investisseurs agricoles, grands, moyens et netits.
- Encourager l'utilisation de l'énergie solaire pour réduire les dépenses et assurer l'intégrité.



LES CONTRAINTES

- Absence d'association avec la même vision et les mêmes objectifs que je m'efforce d'atteindre.
- ☐ Retard dans la mise en œuvre du programme de soutien à l'énergie solaire pour l'irrigation.
- Résistance de certains agriculteurs qui continuent à utiliser du butane et du diesel.

LA POPULATIONS CIBLE

- ☐ Agriculteurs de la Commune de Qusayr.
- Coopératives agricoles et villages qui enregistrent une forte baisse des ressources en eau.
- Observateurs pour assurer le bon fonctionnement des canals d'eau.

LES PARTENAIRES

À ce jour, il n'y a pas de partenaire pour réaliser mon plan de travail et, dans un proche avenir, je chercherai des partenaires pour mettre en œuvre le plan d'action. Les partenaires potentiels du projet sont:

- ☐ Ministère de l'Agriculture.
- ☐ Ministère de l'Énergie, des Mines et du Dév. Durable. ☐ Ministères Délégués de l'Eau et de l'Environnement.
- ☐ Partenaires étrangers.

LES RESSOURCES ALLOUÉES

Le projet n'a pas encore trouvé de partenaire qui peut le financer.

L'APPROCHE

Une approche statistique a été utilisée pour déterminer les conditions d'arrosage et les formes d'utilisation de l'eau dans les champs pour un groupe de 100 agriculteurs. Les résultats étaient les suivants (2016):

- 93 agriculteurs ont une auto-formation et 7 ont déjà bénéficié d'une formation en agriculture.
- 73% des agriculteurs ont des puits d'irrigation, 15% utilisent des petites sources, 8% se mêlent entre la source et le puits et 1% utilisent le puits pour un membre de la famille.







Les résultats de l'étude ont montré un gaspillage d'eau dans l'irrigation: 45% gravitaire, 40% goutte à goutte, 14% gravitaire et goutte à goutte, 1 pulvérisation.

L'eau dans une maison rurale?

45 agriculteurs ont un puits, 28 utilisent un puit de la coopérative, 11 maisons sont servis par l'ONEE. Le reste reçoivent de l'eau du puit d'un voisin, d'un puit de famille ou d'une source.

En général, la profondeur des puits est entre 18 et 60 m.



L'étude du terrain nous a permit de constater que:

- ☐ L'eau est encore gaspillée dans l'irrigation pour une classe importante d'agriculteurs en plus du manque d'intégrité dans la gestion de l'eau.
- Un bon nombre de foyers ruraux doit souffrir la corvée de l'eau qui affecte toute la famille, les enfants et les parents.

LES RESULTATS

- Le plan d'action prévoyait une approche sur le terrain pour sensibiliser les agriculteurs sur un meilleur système d'approvisionnement en eau en utilisant des pompes dotées de panneaux solaires à la place du butane et du diesel.
- 7 agriculteurs du village Ksyer, Province d'El Hajeb (couvrant 62 hectares), ont manifesté l'intérêt pour l'utilisation de la technologie solaire comme méthode alternative de pompage de l'eau au lieu du butane et du gasoil coûteux.

LES LEÇONS APPRISES

- L'amour du travail accompli est le secret du succès et du progrès. Un groupe d'agriculteurs est fidèle à sa terre et dépense son argent pour améliorer les conditions de son agriculture, ce qui impacte positivement son rendement.
- L'ouverture et l'apprentissage de nouveautés à investir pour préserver les ressources naturelles et le développement durable.
- 3. La confiance témoignée par les agriculteurs envers l'administration pour bénéficier du soutien de l'Etat, pour promouvoir le secteur agricole et la valorisation des ressources en eau, et aussi pour profiter des consultations et des ateliers de formation afin d'améliorer la production.

ALLER DE L'AVANT

- Bénéficier du programme de la Conférence Régionale pour l'intégrité dans le secteur de l'eau (Barcelone, 12-14/12/2017) pour enrichir le programme de travail.
- Ouvrir un dialogue avec les parties prenantes dans le domaine de l'agriculture pour discuter des moyens d'activer l'utilisation de programmes de soutien à l'utilisation de panneaux solaires.
- Communiquer avec les agriculteurs afin de les informer des derniers avantages des projets de soutien pour atteindre leurs objectifs vers l'économie de l'eau.

INTRODUIRE L'INTEGRITE DANS LES PROJETS DE GESTION DE L'EAU POTABLE ET DE LA LAVERIE COLLECTIVE A ERRACHIDIA



Moha Maloui

Assistant Administratif et Financier, Programme Oasis Tafilalet, Ouarzazate



LE DEFI

Résoudre les problèmes suivants par le principe de l'intégrité dans le secteur de l'eau:

- ☐ Participation des citoyens à la gestion de l'eau potable.
- Accès des citoyens à l'information des bilans annuels.
- □ Connaissance de la loi sur l'eau au Maroc par les citoyens.
- Crimes environnementaux qui se pratiquent notamment sur les points d'eau.

LA POPULATIONS CIBLE

- □ Les bénéficiaires sont divers à savoir: les villageois ruraux et des centres urbains, les cadres de la société civile, les cadres des institutions publiques (collectivités territoriales, ABH, élus) et les élèves des écoles.
- Les avantages du plan d'action sont: la conscience des bénéficiaires sur les lois en rapport avec l'eau, les approches de participation aux décisions et les droits des citoyens liés à la vie quotidienne.

LES OBJECTIFS

- Sensibiliser les citoyens sur les droits fondamentaux garantis par la constitution qui leur permet de discuter, analyser et décider sans peur ni marginalisation.
- □ Améliorer le climat de crédibilité dans la gestion des projets de l'eau.
- ☐ Utiliser les bonnes pratiques avec le support des partenaires ayant la volonté d'exécuter les futurs projet sur le principe de l'intégrité qui est utile dans tous les processus de la vie des Hommes.

LES CONTRAINTES

- □ Non disponibilité de certains cadres des partenaires lors des ateliers.
- Absence d'une culture juridique et des droits humains auprès des auditeurs bénéficiaires touchant à leur vie.
- Langue de communication dans les villages berbérophones et difficulté de traduite les termes techniques.

Des efforts de recherche linguistique ont été déployés et parfois duplication des actions pour le maximum des bénéficiaires.

LES PARTENAIRES

- □ Administrations publiques: Agence du Bassin Hydraulique Guir Ziz Rhériss, Office National de l'Electricité et l'Eau, Direction Provinciale du Ministère de la Santé Publique, Direction Provinciale du Ministère de l'Education Nationale.
- ONGs: Programme Oasis Tafilalet, Association ATCD, Association AOFEP, Association ATMDAS, et Association Seghniss.

LES RESSOURCES ALLOUÉES

- □ Budget des actions réalisées : 1106 €
- Ressources humaines: 7 cadres ONG, 1 médecin, 2 ingénieurs, 2 cadres experts et 2 instituteurs.
- Ressources opérationnelles: Matériel des sièges associations (tables, chaises, salles, data-show, ordinateurs), de l'Ecole Essadiyine et de l'Agence du Bassin Hydraulique GZR.

L'APPROCHE

- Les activités sont préparées avec la participation concertée de tous les acteurs concernés et les bénéficiaires.
- Utilisation des techniques de communication très simples.

Actions	Bénéficiaires	Femmes Filles	Cadres ONG et ADM
Civisme pour ONG et autres	149	97	52
Loi sur l'eau	100	68	32
Atelier des enfants	55	27	8
Maladies liées à l'eau	109	67	9
Informations aux décideurs sur les RE	30	11	19
Total	443	270	120





 Effectifs des bénéficiaires des ateliers du plan d'action et photos des activités avec les partenaires.



 Par des présentations et des interventions très ciblées, nous avons pu sensibiliser la population bénéficiaire sur la notion de l'intégrité dans le secteur de l'eau.

LES RESULTATS

- Le principe de l'intégrité dans le secteur de l'eau est connu.
- ☐ Les différentes formes de corruption liées à l'eau ont été éliminées.
- □ Les citoyens ont l'accès aux informations de management de leurs projets.
- Ils participant aux décisions et adhèrent aux multiples actions de développement.
- L'intégrité est un moyen de durabilité, de pérennité et de réussite des projets de l'eau.

LES LEÇONS APPRISES

- □ Les gens changent leur opinion sur les procédures de l'administration publique (sacralité de l'administration).
- Les actions de conscience générale aident pour un meilleur avenir.
- Les projets soft sont très importants pour les pays en voie de développement afin d'améliorer leur prise de conscience.

ALLER DE L'AVANT

- 1. Etendre le projet à d'autres zones où l'intégrité n'est pas appliquée.
- 2. Monter un projet conventionnée avec des partenaires.
- Exécution du projet et évaluation des résultats.

RENFORCER L'INTEGRITE DANS LA GESTION DES EAUX DE L'OUED TIZGUITE

Mohammed Drihem

Président, Association Val d'Ifrane, Ifrane

LE DEFI

sècheresse mais aussi et surtout à

l'exploitation abusive de la nappe

Cours d'eau à sec à cause de la

cause des forages illégaux et de

Population d'Ifrane et de la Zaouïa en aval de l'Oued Tizguite en plus

LA POPULATIONS CIBLE

Avantage: Ressources en eau bien espaces verts, aux 15 piscines de la



phréatique.



Cours d'eau de l'Oued Tizguite sec

LES OBJECTIFS

- □ Sensibiliser les décideurs et les exploitants;
- Veiller sur le respect de la loi (brigade d'écogardes);
- Interdire les nouveaux forages et bien gérer les forages existants.

LES CONTRAINTES

- □ Accès à l'information sur les forages autorisés :
- Manque de moyens financiers ;
- □ Formation des Ecogardes.



STEP Ifrane en aval de l'Oued Tizguite

des estivants.

gérées pour subvenir aux besoins en eau potable, à l'arosage des ville et aux agriculteurs en aval de l'Oued.

LES PARTENAIRES

Conseil d'Ifrane et de Tizguite. Autorités provinciale et locales, Agence du Bassin Hydraulique de Sebou, Ministère Délégué de l'Eau, Ministère Délégué du DD, Haut Commissariat des Eaux et Forets et Lutte Contre la Désertification.









Décharge public d'Ifrane en amont des sources bannies

LES RESSOURCES ALLOUÉES

Surtout humaines pour la conception du plan d'action et la réalisation d'une étude sur les espaces verts de la ville et les forages exploités par la collectivité.

L'APPROCHE

Renforcement de l'intégrité dans la gestion des eaux de l'oued Tizguite et de la nappe phréatique afin de subvenir aux besoins d'Ifrane.

- □ 3798 m³/j (66 l/s pour l'arrosage de 80 ha d'espaces verts.
- Eau potable pour 14659 habitants (plus que le double en été).
- **■** Eau des forages pour les 15 piscines des centres de vacances.

LES ACTIVITES REALISEES

■ Etude des besoins d'arrosage

Ressources mobilisées				Observations
Kessources mobilisees	m³/h	Vs	m	
Forage complexe sportif	63	17.5	80	
Forage Hebri	40	11.0	?	Estimation
Piscine municipale	40	11.1	50	Pour les besoins de la prairie
Belayd	45	12.5	80	
Sp2	54	15.0	47.5	
Station Michlifène (SP1)	70	19.4	80	
Ressources totales		86.6		
Ressources à partir des forages		39.6		
Ressources à partir d'eau de surface		46.9		

- ☐ Ateliers de dessins au profit des enfants des colonies.
- ☐ Campagne de nettoyage du cours d'eau Tizguite.
- ☐ Campagne de nettoyage et de plantation d'arbre de la zone du dépotoirs municipal banni.
- ☐ Pétition pour la préservation du SIBE Tizguite.





Oued Tizguite arrosant le Val d'Ifrane





LES RESULTATS

- **□** Décideurs et citoyens sensibilisés sur l'intégrité et la bonne gestion des ressources en eau.
- □ Après le PAG du Val d'Ifrane présenté à SM le Roi à Ifrane:
 - Fermeture et réhabilitation du site de la décharge municipale éloignée des sources de Tizguite en 2015.
 - Réhabilitation des canalisation du réseau d'assainissement et construction de la station d'épuration des eaux usées en aval de l'oued Tizguite en 2017.





Campagnes de sensibilisation

LES LEÇONS APPRISES

- **■** Etre patient pour réussir
- ☐ Travail de groupe indispensable

ALLER DE L'AVANT

- □ Réunion de sensibilisation avec directeurs des villages et colonies de vacances.
- □ Réunion similaire avec le Maire et les conseillers de la ville.
- ☐ Formation d'éco-gardes volontaires.



Gouvernance des eaux souterraines contrat de la nappe de Berrechid

Salah Bel Matrik

Secretaire General, Agence du Bassin Hydraulique du Bouregreg et de la Chaouia, Berrichid



PROBLEMATIQUE

- L'eau est un bien commun, sa gestion est l'affaire de chacun, la préservation de sa quantité et de sa qualité doit induire des comportements individuels adaptés aux nouveaux enjeux.
- Les citoyens sont amenés à s'investir directement dans sa gestion locale, puisque la politique de l'eau se veut le fruit d'une concertation entre tous les usagers.
- ☐ La nappe de Berrechid (1500 km²) présente une importance sur le plan économique et social. Sa surexploitation entraine un dénoyage de plus de 30 Mm³/an pour satisfaire 95% des besoins agricoles et 5% des AEPI, une augmentation de la salinité et une diminution de la productivité.
- □ Ainsi, 8312 ha sont irrigués de manière très consommatrice d'eau et représentent 46% de la surface totale irriguée.
- ☐ Ce dénoyage est considéré comme la résultante de différents problèmes :
 - Absence de cadre organisationnel.
 - Augmentation du nombre de points d'eau (+4000 puits et ou forages).
 - Extension incontrôlée et importante des zones irriguées.
- En l'absence de mesures effectives pour maitriser les prélèvements, la zone connaitra :
 - une perte de 43% de la surface irriguée (640 km²).
 - une baisse du niveau de la nappe de 15 m.
 - des prélèvements pouvant atteindre 162 Mm³/an à l'horizon 2035.

Pour assurer la restauration de cette nappe plusieurs actions sont programmées entre autre la mise en place de contrats de nappe durable et participative avec l'ensemble des intervenants

DESCRIPTION DU PLAN D'ACTION

Le contrat de nappe est considéré comme l'un des actions qui réside dans la mise en place d'un nouveau mode de gouvernance qui favorise la participation et la responsabilité des acteurs concernés dans un contrat négocié à savoir : administrations, autorités locales, elus communaux, société civile et usagers.

Les objectifs de ce contrat :

- créer un dialogue concentré sur les principes et les pratiques d'intégrité de l'eau multipartite.
- faciliter un dialogue constructif entre les différentes parties prenantes du secteur de l'eau sur les questions de transparence, de responsabilité et de participation.
- assurer leur engagement envers les meilleures pratiques en matière de gestion de l'eau.

PLAN D'ACTION

- ☐ Elaboration des études techniques par l'Agence du Bassin Hydraulique Bouregreg et de la Chaouia.
- ☐ Création des comités de pilotage et de suivi.
- Présentation au comité de pilotage l'état actuel des RE et les résultats des scénarios de la modélisation hydrodynamique avec Scénario prévisionnel tendanciel.
- Elaboration des plans d'actions de scénario optimale en concertation avec le comité de suivi.
- Présentation, au comité de pilotage, des résultats des plans d'actions des scénarios de la gestion optimale retenus.
- Réunions au niveau des communes concernées et avec les usagers de l'eau. Implication des intervenants dans l'établissement de la feuille de route et identification des plans d'actions.
- Présentation des résultats des plans d'actions retenus au comité de pilotage avec les couts, les délais, les fonctions de chaque intervenant et les indicateurs de suivi et d'évaluation.
- Préparation de la version initiale du contrat de nappes par le comité de suivi et présentation de cette dernière au Comité de pilotage pour approbation.
- Réunion régionale élargie au siège de la Wilaya pour la signature du contrat de nappes après préparation de la version finale et son approbation par le comité de suivi.
- ☐ Mise en œuvre et évaluation à mi parcours.

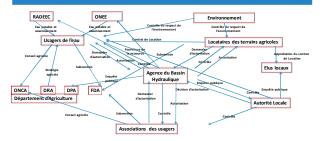
NOTES ET COMMENTAIRES DES RÉUNIONS DE MENTORING

Organisation de:

- plusieurs journées d'information et de sensibilisation au niveau des différents groupes impliqués.
- ☐ 15 ateliers.
- ☐ 6 journées consultatives au niveau des travailleurs concernés
- une journée d'étude en concertation avec la FAO



PARTENAIRES



RÉSULTATS PRÉVUS

- Engagement des parties prenantes à utiliser les meilleures pratiques en matière de gestion de l'eau. Travailler avec les parties prenantes pour développer leur appropriation des principes et méthodes d'intégrité.
- ☐ Gérer l'aquifère en partenariat avec les autorités locales, le ministère de l'agriculture, la chambre de l'agriculture, les associations de la société civile et l'agence du bassin hydrographique.
- ☐ Fixer le quota d'eau de chaque association est déterminé en fonction des précipitations et de l'état de la nappe d'eau Lors d'est une réunion annuelle à la mi-septembre..
- ☐ Encourager la création d'associations représentatives actives et proposer que le nombre total de ses travailleurs soit supérieur à 1 000 hectares.
- Etablir annuellement la liste des membres de chaque association d'irrigants ainsi qu'un plan topographique précisant leurs zones d'irrigation,
- ☐ Etablit un contrat de concession avec chaque association conformément au chapitre 44 de la loi sur l'eau 15/36.
- Chaque association doit s'engager à respecter le quota d'eau convenu et nous proposons pour l'année agricole 2017-2018 de déterminer ce quota en 5000 m³ / ha comment la qualité de l'agriculture.
- ☐ Identification du groupe de travail pour le suivi avec la participation de tous les acteurs
- Détermination des pénalités pour ceux qui n'ont pas respecté les quantités d'eau convenues dans ce contexte à savoir:

Moins de 2% juste un avertissement.

■ De 2% à 5% 100 MDH/m³. ■ De 5% à 10% 500 MDH/m³.

Plus de 10% sont interdit d'exploiter l'eau.

Enhancing integrity and accountability in water management



WHAT IS THE CHALLENGE?

 What is the problem you are trying to solve? Here state what is the current situation, what is not working, what needs to be changed.

An unsupervised agricultural spring within the area of the Rusayfah- Al-Zarga area used to irrigate crops, without taking into consideration any justice in distribution and the loss of opportunity for a large number of small farmers (especially women) to benefit from the water fairly, due to lack of control or/ and accountability.

what needs to be changed:

- Lack in water distribution justice.
- · Lack of control or/ and accountability
- Water loss.

PEOPLE

- Beneficiaries (people benefiting from the action plan
- Small farmers of the Rusayfah/ Al- Zarga area, specially

APPROACH

- How is the Action Plan solving the challenge? What activities were
- 1. Holding an awareness session for farmers on the importance of justice and fairness in the distribution of water, and gaining their support for the importance of working on water access for all
- 2. Three meetings were held with all stakeholders and partners
- 3. A workshop was held to identify the requirements related to equitable distribution and to allow the less privileged group to access water
- 4. Start work on some solutions observed, which may come out of brainstorming sessions to overcome the obstacles that prevent the access of all water, such as the extension of conveyor lines and increase the number of pumps for at least two pumps
- 5. Forming a committee to supervise the operation and rehabilitation of the spring and the drafting of an internal organizational charter for the

You can use graphics, table, pictures here if needed as the examples below

RESULTS

- · Reducing water losses and increasing the number of irrigated farms by a clear, specific and fair role to (6) farms of different farmers, while increasing the opportunity of farmers with limited financial capacity to irrigation and access to water fairly.
- The existence of a general supervision committee that works on the principles of integrity and transparency.
- Increase the level of satisfaction of small farmers, and increase awareness of the importance of their work together, the principles of partnership and its positive impact on production.

WHAT DO YOU WANT TO ACHIEVE?

- · What is the Action Plan solution? What is the change/answer/solution proposed to solve the situation mentioned above.
- Increasing the efficiency of the use of water to irrigate more than 6 farms in a systematic manner from al-Ghidaniya spring suitable for irrigation within 6 months.
- Increase the amount of water to be pumped by double from (25) cubic meters to (50) cubic meters per hour.
- The establishment of a community mechanism to regulate the use of water, agreed by all partners and in the achievement of justice during the project period of (6)

PARTNERS

- · What were the partner's organization with whom you collaborated to have this action plan implemented?
- Municipality of Rusayfah.
- · Adult farmers.
- · Member of the Jordanian Parliament
- Civil Societies

LESSONS LEARNED

- The importance of involving all, including women and young people, in issues of water integrity
- . The importance of expanding the work on the issue of water integrity to include new categories such as refugees and migrant workers for their impact on water issues in general
- Dealing with water issues in highly sensitive to the great effects it poses on various sectors of the population, agriculture and industrial sectors.
- The partnership of all with transparency and accountability is the only way to manage water wisely

MAIN CONSTRAINTS

- · What were the main constraints when implementing your action plan?
- There is no financial allocation to the idea. All the activities carried out with the internal support of the Dibeen Association for Environmental Development, which I lead.
- · The farmers in Rusayfah use a personally owned spring in the land of a farmer and not considered as a public property, so there was a challenge in reaching the goal of participation, which will be achieved only with financial and material allocations.
- · The presence of reverse forces is not in their interest to unify the efforts of farmers and stakeholders to own agricultural plots for personal investment.

RESOURCES ALLOCATED

- · What was the budget?
- Small budget from Dibeen Association, used to allocate meeting and awareness trainings.
- · What were the resources allocated

Human: awareness trainings, meetings.

financial:

operational resources:





- Al Ghaidaniya Water Spring.
- Meeting with farmers with parliament member.
- · Visit of the Jordanian Minister of Environment to the spring site

- · Started the implantation of the same action plan in another directorate, after the primary assessment, there is a lot of water theft and illegal wells in the area, the program was implemented in cooperation with Jadra Private University. A number of water-related students were trained in the concepts of water sector management and governance and the concepts of integrity in water sector management.
- Providing more training and awareness in future to all sectors of the society, including students, youth and women, to reach a general awareness of the importance of governance and integrity in the management of the water sector.

Water Integrity Capacity Building Program for MENA

Al - Balawnah Charitable Society



 What is the problem you are trying to solve? Here state what is the current situation, what is not working, what needs to be changed.

The region's population is suffering from lack of access to their shares of the water through the pipelines for several reasons, including:

- The attack on the carrier lines by the residents of low-lying areas
- water tanks provides a rate of one cubic meter per household per week while the average number of family members of six members
- The use of drinking water for purposes of irrigation, livestock and watering home gardens, since; this is a rural region suffering a high temperature and Low Income
- Line Carrier are connected with four other lines with lower levels. leading to poor water pumping

The residents complained to the water authority to separate the main carrier line of drinking water. But; the authority reasoned by the lack of adequate financial allocations, and the possibility of compensation for the lack of water by water tanks.

PEOPLE

- Beneficiaries (people benefiting from the action plan
- Residents of the project area.
- Government represented by water authority + water company + water stations (private sector)

APPROACH

- How is the Action Plan solving the challenge? What activities were
- 1. Collect information to evaluate the current situation with photo authentication (forms + verification images)
- 2. Holding public hearings (community meetings) to listen to the voice of those concerned with the problem / affected by the water situation with documentation + reports
- 3. Formation of a committee of beneficiaries from local residents, owners of tanks, water authority.
- 4. Conducting workshops to identify the needs of equitable distribution, access to water and organized roles under the supervision of water
- Hold sessions to identify the needs associated with equitable distribution and allow all groups access to water and seek support and partner to improve the carrier lines

You can use graphics, table, pictures here if needed as the examples below

RESULTS

- Decrease in the number carrier lines abuses at the central
- Lower water loss as a result of perversion by citizens or because of the leakage of pipelines sometimes because of environmental factors.
- Decrease in the number of citizens' complaints of cases of favoritism by employees to specific citizens.
- Improvement of the status of water pumps and pipelines to suit the geographic nature of the areas.
- The existence of a clear mechanism for submitting complaints and receiving replies between citizens and
- · Activating the role of internal control in the official bodies in supervising employees' shifts due the distribution schedules.

WHAT DO YOU WANT TO ACHIEVE?

· What is the Action Plan solution? What is the change/answer/solution proposed to solve the situation mentioned above

General Objective: To provide justice in the distribution of drinking water in the central areas of the Jordan Valley through:

- · Reduce the abuse of the carrier lines for drinking water.
- Increase the actual per capita drinking water
- Organizing the distribution process according to the specific
- Provide justice and improve the quality of service by reducing the percentage of losses by 30% during the hot summer months
- Decrease in the number of complaints by affected citizens
- Establish a common Procedure for the submission of complaints

PARTNERS

- · What were the partner's organization with whom you collaborated to have this action plan implemented?
- Al-Balawnah Charitable Society represented by the project
- · Government Water Authority.
- The affected community.
- Jordan University of Science and Technology / Queen Rania Center for Information Technology

LESSONS LEARNED

- The importance of the role of community participation in the conservation of natural resources.
- The ability of communication between citizens and government agencies to solve problems related to the delivery of services
- · The importance of educating citizens about the concept of integrity and that water is a fundamental right that is undeniable regardless of the social status of the citizen



MAIN CONSTRAINTS

- What were the main constraints when implementing your action plan?
- · Lack of budgets.
- · The hard nature of the project work area.
- Non-cooperation of officials.
- Credibility of official statistics.
- Opposition of some citizens and employees benefiting from the existing imbalance.

RESOURCES ALLOCATED

- What was the budget?
- Bonus: (40 working hr. x 10 JOD per hr.) = 400 JOD
- · What were the resources allocated

financial:

- operational resources:
- · Transportation: 240 JOD
- · Communications: 130 JOD
- · Refreshments: 250 JOD

TOTAL: 1020 JOD

BROKEN CARRIER LINE

- THE SAME BROKEN CARRIER LINE TWO WEEKS AFTER
- · Visit of the Jordanian Minister of Environment to the spring site

- Started the implantation of the same action plan in another In the future, it is possible to cooperate with the boards of the decentralization committees (elected committees representing the interests of their regions before the executive authority) in order to shed light or to work to settle the imbalance at wider areas in the Jordan Valley.
- the experience we acquired by the project could help us implementing the project with other services such as irrigation.
- Work with other organizations in the field of water to expand and generalize the project.
- The areas of the central valleys are very warm in summer and this leads to a wider visibility of water problems.

Reduce NRW by control water theft, and manipulation in water meters

Saleh Almomani: Director of Alramtha Water Directorate, Yarmouk Water Compan

WHAT IS THE CHALLENGE?

 What is the problem you are trying to solve? Here state what is the current situation, what is not working, what needs to be changed.

Fighting water theft(The over all NRW of the selected area (2300 subscribtions) is 40% as documented by Bani Obaid water directorate

The assessment identified the reasons behind non revenue water(NRW) is:

- non working meters (some of these meter are not working due to subscribers manipulation).
- · Water stealing by illegal connections.

PEOPLE

- Beneficiaries (people benefiting from the action plan outcomes).
- Yarmouk Water Company(finically):
- 1) the reduction of NRW by 8%.
- 2) The number of complaints decreased
- 3) The overall income of water bills in customer services department is increased.
- Customers: the quantity of received water by the distribution system is increased.

APPROACH

- How is the Action Plan solving the challenge? What activities were done?
- 1. increasing the Operating and maintenance team number.
- 2. Applying monitoring to discover illegal connections.
- 3. CHANGING THE Non working meter (zero reading)
- 4. Putting key code on the water meter to prevent





RESULTS

Rectify the situation of the $\,$ illegal water connections all over the camp about 1200 water meter $\,$.

2- Some of subscribers of illegal connections sent to the court and fined, one of them fined by 7000JD.

WHAT DO YOU WANT TO ACHIEVE?

 What is the Action Plan solution? What is the change/answer/solution proposed to solve the situation mentioned above.

Prevent the manipulation and water theft.. By increasing the level of accountability and transparency.

PARTNERS

- What were the partner's organization with whom you collaborated to have this action plan implemented?
- Yarmouk Water company.
- Bani Obaid security Ceneter.



LESSONS LEARNED

- We need to engage all stakeholders to achieve good results.
- Transparency in follow- up the problems, fight favoritism, and manipulations can be achieved easily.
- Use participatory approach is the main key in our work.

MAIN CONSTRAINTS

- What were the main constraints when implementing your action plan?
- 1-Opposition the subscribers to disconnect the water, so the police cooperate with us to apply the law and disconnect the illegal connections.
- 2- financial limitations.
- 3- operation and maintenance team no.

RESOURCES ALLOCATED

- · What was the budget?
- Cashing bonus to the working team: 1 working hour equivalent to 1 and half (because it is additional work
- · What were the resources allocated

Human: O& M team financial: Cashing bonus

operational resources: O&M equipment.

- Type a caption for the data content or pictures here.
- How is the Action Plan solving the challenge?
- What activities were done?

WAY FORWARD

Started the implantation of the same action plan in another directorate, after the primary assessment, there is a lot of water theft and illegal wells in the area.

Enhancing the public accountability and participation in cooperation with the "National Observatory for Water Issues"

Wasfi Almomani

WHAT IS THE CHALLENGE?

What is the problem you are trying to solve? Here state
what is the current situation, what is not working, what
needs to be changed.

Strengthening accountability and puplic participation through the National Observatory for Water Issues

PEOPLE

All of Zarqa's community groups might benefit from this project

PARTNERS

 what is the action plan solution? what is the change/answer/solution proposed to solve the situation mentioned above.

WHAT DO YOU WANT TO ACHIEVE?

- improving the community involvement in monitoring and observing water issues and contributing in finding practical solutions
- develop an avilable high-performance online system to report waste water issues which covers the zarqa city
- raise the response level in addressing water issues up to 80% of registered issues
- develop a system and monitoring standards to observe the water sector integrity issues

- What were the partner's organization with whom you collaborated to have this action plan implemented?
- Radio Sawt Al Zarga
- Zarqa City Youth Council
- · Civil society organizations
- · Volunteers and stakeholders
- .

MAIN CONSTRAINTS

 What were the main constraints when implementing your action plan?

Lack of transparency in water management.

Poor public participation in water management.

Lack of access to information

Favoritism in delivering water to citizens

Poor accountability regarding water management

RESOURCES ALLOCATED

Human Resources: - Volunteers from all community groups.

Technical resources: - Smart applications installed on smart communication devices.

Financial resources: - The cost of the smart application

The estimated budget is 15000 USD

APPROACH

- How is the Action Plan solving the challenge? What activities were done?
- The Observatory provides information about the policies implemented by the government to maintain the water infrastructure. Also to identify the necessary indicators for the administration in order to obtain accurate knowledge to develop its knowledge system and increase its ability. The goal is to maintain the infrastructure and restore what is necessary to avoid losses in the water sector.
- The Observatory focuses on good management and governance of water systems in order to ensure sustainability and maintain it in excellent condition, Taking into account the future investments and taking every possible effort to avoid corruption and administrative and technical slowness.
- Establish an online national observatory to monitor and record water issues.
- . Employ a group of volunteers to conduct a survey and report water issues.
- . Making films about water issues by volunteers and sharing it with decision makers.
- Develop the necessary infrastructure's management indicators in order to obtain a

RESULTS

A page was created on Facebook with the same name, followed by about 6 thousand people

A non-profit organization was registered to launch the project.

- A group of complaints was monitored by the citizens and resolved in cooperation with the Water Authority,
- The Director of the Water Authority was hosted several times through the "Good Morning Zarq" radio program, which is broadcast by Radio Sawt Al Zarqa on frequency 101.8 in order to receive citizens' complaints directly on air,

LESSONS LEARNED

- Expanding the public participation base in monitoring of water issues through the establishment of an alliance network of community and civil society organizations.
- Implementing an expanded training program aimed at all participants in the alliance as well as a network of volunteers.
- Conducting training programs and workshops to raise community awareness about the services of the Observatory.
- Keep abreast of technological developments through smartphone applications.
- · benefiting from the experiences of other countries in this field.