

Sustainable Water Integrated Management (SWIM) – Support Mechanism

REGIONAL EXPERTS GROUP WORKSHOP ON WATER
USERS' ASSOCIATIONS IN THE SWIM-SM PROJECT
COUNTRIES

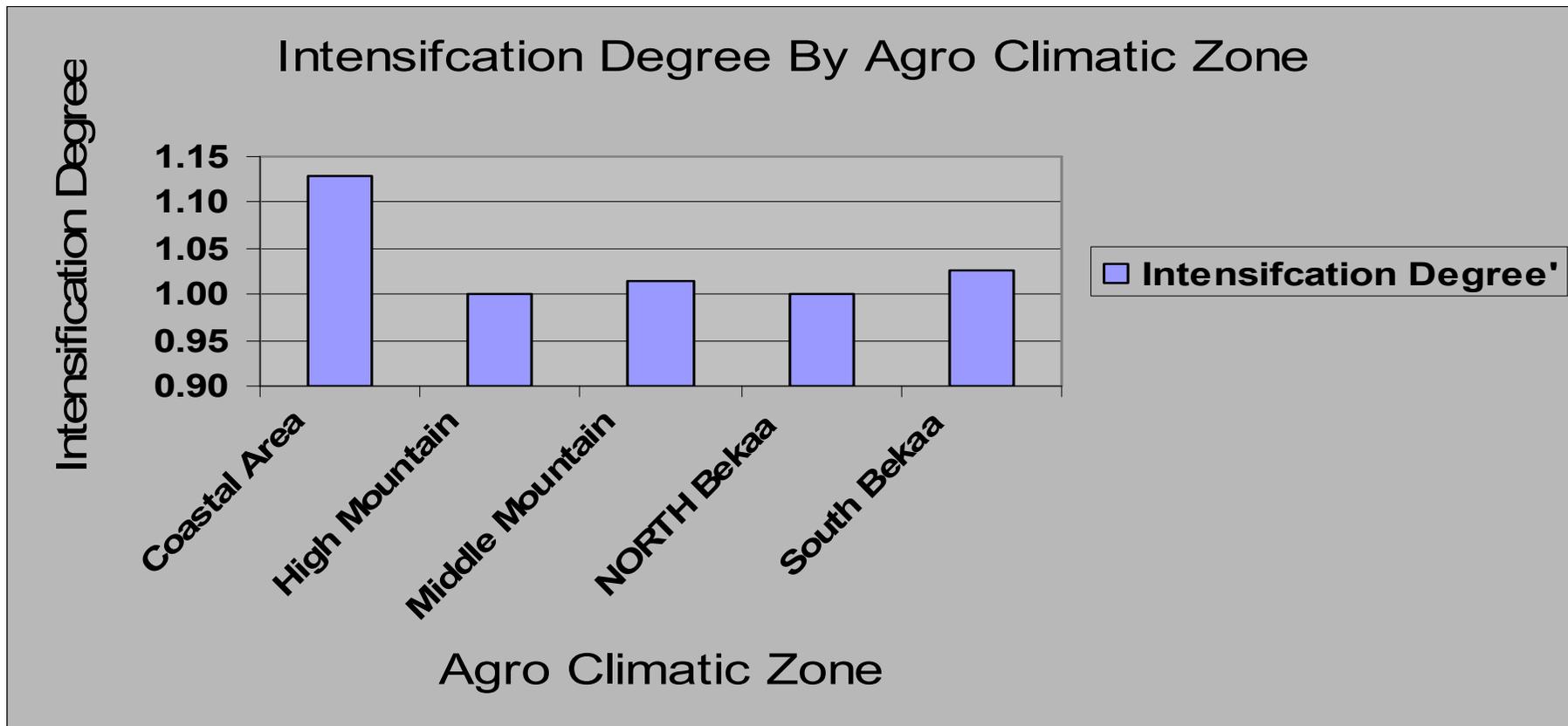
LEBANON Presentation

Kamal KARAA
Consultant Expert on Water Projects

Athens, Greece
23-24 April

Irrigation in Lebanon: State of the art

- **Schemed Irrigation 57.94% :**
 - Old schemes with traditional gravity systems (90.37%)
 - Pressurized schemes: Two, equipped by LRA (9.63%)
 - South Bekaa Irrigation scheme (2000 ha)
 - East Saida Pilot Sector (about 300 ha irrigated from a total of 1200 ha)
 - Resources : Surface Water
- **Private irrigation 42.06%**
 - Mainly Pressurized irrigation system (91.00 %)
 - Resources: Underground Water (wells) in general and some pumping from river bed



Future and ongoing Projects - Intensification degree in %		
South Lebanon Project	ASSI Project	South Bekaa project
146.19	151.14	159.00

Overview of water users participation in Lebanon

- Users don't have an effective participation in perimeters directly managed by
 - LRA or Water Establishments (ex: Qasmieh, Yammouneh)
 - Municipalities (Kfar debiane, Aanjar)
- With or without committee, users manage their:
 - Irrigation operation by hiring a guard "Shawi"
 - Maintenance is very limited or inexistent

Overview of water users participation in Lebanon: WUA experience

- Associations created under cooperative law or law 320 of 1926 don't have the constitution or functionality of a WUA
- No positive link with water provider (LRA or WE)
- The closest associations to WUA are those ongoing establishments in the region of "Hydro Agriculture Development Project of Marjeyoun" (HADPM):
Marjeyoun Debbine, Blat, Ibl el Ski and Borghoz
 - The creation of these WUAs is based on the new WUA draft legislation established by the project
 - Implementation is supported by CIHEAM – IAMB in the field and by a one week visit to the Consortium of Capitanata completed by capacity building in Bari

Main features and instruments for the formation of the WUAs in Lebanon

- Create and apply new legislations insuring a proper performance and sustainability of the WUA
- On field implementation of WUA: awareness campaign, monitoring by experts,
- Capacity building of the WUA members at technical and administrative levels

Main features and instruments for the formation of the WUAs in Lebanon

New legislation's Advantages : New Irrigation Projects

- Must be established before the implementation of the irrigation project in order to assure:
 - The sustainability by making a kind of an inquiry, to elicit willingness of farmers to allocate a certain perimeter for agriculture: If more than 50% of farmers or 50% of the perimeter area is assured, the perimeter is classified as agricultural for the life of the project
 - Good governance by involving farmers in preparation works : Cadastral maps, Detailed land classification for ability to irrigation, Land reclamation(designs and works) and Hydrant design
 - The technical knowledge earned by the WUA along the implementation phase will be useful for capacity building
 - Replacing expropriation for distribution network by access right (Droit de passage)

Main features and instruments for the formation of the water users' associations in Lebanon

New legislation's Advantages: Irrigation schemes and Underground water

- Implementation is obligatory for old irrigation schemes and for private irrigation from underground water
- For underground water, the law obliges the creation of WUA where more than one user are pumping from the same underground source of water
- WUA must provide the MEW by data related to pumped volumes and variation of the depth of water table. This made, a double control for water use is done in order to reach an equilibrium between water use and yearly renewable water

Main features and instruments for the formation of the water users' associations in Lebanon

New legislation's Advantages: common futures

- Membership is related to parcel
- Any person having official papers can obtain the membership : Owner, one of shared owners, legal representative, person hiring a parcel etc.
- On demand by the WUA, municipality can delegate Water officer
- Water Establishment or LRA are directly linked to WUA for:
 - Water providing agreement
 - Capacity building on water management
- Demand for WUA establishment is done at local administration (Mouhafazat)
- Permission for WUA Creation is the responsibility of the Ministry of Energy and Water
- Total control for administrative and financial issues is the responsibility of MEW
- WUA can be aggregated in Consortium having a:
 - Mutual insurance program
 - Center of mediation and arbitration

Measures to be adopted: Reinforcement of Extension services

Reinforcement of Extension before, during and after Projects implementation

- Awareness of the existing facilities for irrigation: training courses, technical sheets, lab analysis, technical assistance, meteorological information
- Continuous production of new technical materials dealing with imminent problems
- Farmers capacity building
- Farmers technical assistance:
 - Creation of a laboratory to control the performance of the different brands of irrigation equipment's existing on the market
 - Help on field equipment design, acquiring and using
 - Schedule irrigation application
 - On farm technical assistance

Role of WUA at Short and medium term Co-decision

- **Existing traditional gravity schemes**
 - Participation to the elaboration of the modernization plans
 - Replace expropriation by « droit de servitude » for the new tertiary networks projects
 - Adoption of drip and sprinkler irrigation techniques according to existing crops
- **Existing pressurized schemes** : Assume the management, operation and maintenance of the tertiary network in particular:
 - functionality of tertiary network according to the norms
 - Protection of tertiary network against vandalism

Measures to be adopted: Farmers **Equity** assurance

- **Tariff:**
 - Depending on Agro Climatic zones (Intensification degree and nature of crops)
 - Tariff must cover Operation and Maintenance
 - Adopting water volume to calculate water fees
- **Assuring:**
 - Fair production costs
 - Local and Foreign Marketing

Weaknesses/ constraints to the development, reinforcement and sustainability of WUAs

- Political constraints at :
 - Parliament and government level: Very slow process to promulgate and prepare executive decrees
 - Local policy: divergence in the community
- Material incentives at the beginning of implementation
- Capacity building on water management at farm and distribution level
- Agricultural Extension services
- Agricultural policy and especially marketing of agricultural products

Factors of success and failure including lessons learned and best practices

- Interest and enthusiasm of farmers:
 - Lake Share Communities Union: Created on the SBIS in 2003 with ten persons, in 2008 the number increased to 55 from the five cadastral zones of the schemes
 - The four WUA of Marjeyoun area
- No interest of the institutions:
 - LRA does not give any advantage
 - The official formation of the WUA of Marjeyoun still balanced between administrations from 2011 summer

Conclusion

- The promulgation of the new Law and its executive decrees, could be the starter of implementation of WUA at the national level

THANK YOU