



An inventory of relevant stakeholders

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World Soil Information



Relevant end-users / stakeholder groups

Introduction

The involvement of all stakeholders in problem analysis and search for solutions is generally accepted by scientists and practitioners. An inventory of relevant stakeholders in the study areas can be achieved through a stakeholder mapping exercise, in which the “stakes” of various stakeholders can be assessed. Stakeholder analysis refers to a range of tools for the identification and description of actors or stakeholders on the basis of their attributes, interrelationships, and interests related to a given issue or resource (Ramírez 1999).

The results of this inventory will be matched with the regional context and will help to identify key players and beneficiaries and also to focus other WBs (e.g. WB3, WB5). Restoration of land degradation is often costly and labour-intensive. The benefits of mitigation measures should therefore outweigh the investments made. Sometimes restoring a severely degraded area is less cost-effective than prevention of (further) degradation in a much less degraded area, but the decision which measures to take where depends on the objectives of the various stakeholders and the intended land use. Taking measures to restore soil fertility in a soil suffering from nutrient depletion is not a sensible idea if the same land is intended for new construction activities. Sustainability goals and objectives for protection and restoration (see also WB3) were identified through facilitated discussion and multi-criteria evaluation in focus groups including the stakeholders as identified above.

Grimble and Wellard define (1997) stakeholders as “any group of people, organised or unorganised, that share a common interest or stake in a particular issue or system; they can be at any level or position in society, from global, national and regional concerns down to the level of household or intra-household, and be groups of any size or aggregation”. They view subsistence farmers and other small-scale resource users, as key, and often neglected, stakeholders in NRM, but stakeholders may equally include policy-makers, planners and administrators in government or other organizations, commercial bodies, and more nebulous categories such as ‘future generations’, the ‘national interest’ and ‘wider society’.

The following general inventory was mainly based on the following sources:

- Study Site Descriptions
- Interviews with Study Site coordinators
- WB3 Stakeholder workshops

WB3 and WB6 have also done more analysis of stakeholder groups and their needs. See reports of WB3 and WB6, in particular the stakeholder workshop reports of WB3 (deliverables 3.1.2 and 3.3.3) and the report on user requirements for the HIS (deliverable 6.1.1).

Results

Boteti, Botswana

Area and people

Land uses around mining area and nature reserve. People have lost lands to these uses.

Added value of DESIRE for stakeholders

- Documentation of current practices
- New technologies to explore
- Exchange between professionals and farmers
- With the project and building on previous projects
- DESIRE project can help people to prepare and get ready for future central government planning who will come and ask what to implement for the next year
- DESIRE empowers people through self-discovery and contribute to the planning; what and how to address

There is a high willingness to participate and community leaders were very supportive.

Stakeholders SS workshops

- Community leaders of about 5000 people in villages
- GBOs and NGOs

Limitations for spontaneous implementation of SWC practices

Lack of knowledge transfer on new technologies

Investment costs too high

Lack of access to credit

Perception of stakeholders

Stakeholder groups:

- The Kalahari Conservation Society (KCS - an environmental NGO),
- The Ministry of Agriculture
- Ministry of Environment, Wildlife and Tourism (implementers of the UNCCD)
- The Ministry of Local Government (charged with local development)
- The Ministry of Lands & Housing (charged with land administration)
- Extension staff for agriculture
- Extension staff for wildlife
- The Sub-Land Board in Boteti
- The Boteti Sub-District Council
- Tribal Administration (the Chiefs and Kgotla – tribal assembly)
- CBOs (e.g. Village Development Committees and the Mokopi Conservation Trust in Mopipi)
- Community members (land users)

Cape Verde, Ribeira Seca

Area and people

This site is subjected to problems of movement of mass due to the strong rains and of the drought, what causes the disappearance of the rain fed crops, the soil erosion and the drying out of wells.

Added value of DESIRE for stakeholders

The time spent on the ground allows establishing a reliable relation between the researchers and the local stakeholders. What allows that the strategy which will be tested will be really wanted by the local peoples.

Stakeholders SS workshops

About forty persons participated to the workshop. Were present, farmers, breeders, representatives of OCB, local elected representatives (2 representatives, technicians water and natural resources of 3 municipalities), a representative of the ministry of agriculture and one NGO (the OMCV). During the workshop, the researchers felt a big expectation of the local populations. Made mobilize these actors gives them a moral obligation as for the results of the DESIRE project.

Limitations for spontaneous implementation of SWC practices

The solutions are too expensive for these poor populations.

Absence of a public policy currently, there was a strong implication of the state since 10-15 years but they didn't maintain their buildings.

Stakeholder groups:

- **Govt./Project staff**
 - § **National:** researchers from INIDA and Uni CV
 - § **Local:** Municipalities and local delegation of MADRRM
 - § Municipality of São Domingos
 - § Municipality of São Lourenço dos Órgãos
 - § Municipality of Santa Cruz
 - § Delegation of the Ministry of Agriculture of São Domingos
 - § Delegation of the Ministry of Agriculture of Santa Cruz
- **Public administration**
 - § *agriculture is under the responsibility of DGASP*
 - § *forestry is under the responsibility of DGASP*
 - § *land is under the responsibility of DGASP*
 - § *water is under the responsibility of INGRH*
 - § *livestock is under the responsibility of DGASP*
 - § *environment is under the responsibility of DGA*
- **Research Centers and Universities**
 - § INIDA, Uni CV; University of Jean Piaget
- **NGOs / Community based organizations**

Several Non Governmental and Community-based Organizations are engaged in the issues related to environmental management. Some of them are:

Nº	Non Governmental Organizations	Target zone
1	The Friends of Nature	São Vicente Island
2	ADAD - Association for Environment Defense and Development	National
3	Garça Vermelha (Heron Purple)	Santiago Island

4	Capverdian Women Organization - OMCV	National
5	Citi Habitat	National
6	MORABI (Association of Women's Self-promotion and Development)	National
7	ACACEA	National
8	OASIS (Organization of Rural Associations of Santiago's Island)	Santiago Island
9	Sol & Vento (Sun & Wind)	National
10	Fórum Permanente para a Educação/Desenvolvimento (Permanent Forum for Education/Development)	National
11	AJOPOP (Association of Population Reporters)	National
12	OAF (Organization of Rural Associations of Fogo's Island)	Fogo Island
13	CARITAS	National
14	OADISA (Organization of Rural Associations of Santo Antão's Island)	Santo Antão Island
15	Bornefonden	National
16	Platform of NGOs	National

- **Media (journalists):**

- § *AJOPOP (Association of Population Reporters)*

- § *Rural Television and radio program – Há mar há Terra*

- **Schools:** There are several schools (EBI and High schools) in the study site

- **Land users (Groups of land users organized in local Association)**

- § Ago Longueira
 - § Agro Orgãos
 - § Agro Laje
 - § Agro Montanhinha
 - § Agro Orgaos Pequeno
 - § Agro Amo Bom
 - § Agro Banana
 - § Agro Godim
 - § Agro São Cristovão
 - § Agro Ribeira Seca
 - § Agro PRI Seca

Chile

Area and people

On this site the majority of the farmers are small farmers.

Added value of DESIRE for stakeholders

The local actors hope that this project will influence the decision makers to finance the implementation of the solutions. The INIA felt a very strong expectation of the local actors.

Stakeholders SS workshops

One day with the local actors; small farmers, big owners, representatives of 4 institutes of research (INIA, IDAP, IRD), representatives of companies and a technician of the municipality. Then two days with the external actors. The INIA was very satisfied with the participation.

Limitations for spontaneous implementation of SWC practices

The solutions are too expensive for these poor populations and absence of a public policy.

Stakeholder groups:

- A fundamental and key user institution of the information generated by the project would be the **Institute of Agricultural Development** (INDAP, <http://www.indap.gob.cl>). INDAP has for mission to attend technically and to lend credit to the small farmers of Chile. In particular in the Mediterranean region INDAP develop programs for recovery degraded soils, fomenting tools for soil conservation like the construction of simple structures for erosion control at farm level, cover crops and sown pastures, and the plantation of trees with agro-forestry purposes.
- The Centre of Education and Technology (CET, <http://www.corporacioncet.cl>) has the mission of help small farmers to increase their life quality improving their technology, agriculture productivity and sustainability of natural resources. The CET has an active role on the articulation of rural organizations with county authorities, research centers and state institutions, in order to have influence on the design of new policies related with rural life.
- A number of NGOs are available in the secano interior working with small farmers, like Agraria (<http://www.agraria.cl>), Grupo de Investigaciones Agrarias (GIA, <http://www.gia.cl>) among others.
- The large majority of the land in the “secano interior” is private, therefore farmers and forest companies will be the final users. An active divulgation program will be necessary for the diffusion of new technologies to small, medium and large farmers, as well as forest managements.

China

Area and people

The majority of farmers are small farmers, but farmers are increasingly also involved in off-farm activities

Added value of DESIRE for stakeholders

Stakeholders think that the DESIRE approach is effective in identifying the causes and effects of land degradation, and can help to make a reasonable strategy of sustainable land management. The evaluation of measures of local and external stakeholders gives a clear understanding of importance and benefit of different technologies.

Stakeholder SS workshops

Land users and government officials

Limitations of spontaneous implementation of SWC practices

Since the 1950s, soil and water conservation has been carried out in this region and some progress has been made. The vegetation cover increased and many silt-collection dams have

been built. Yet this achievement can not cover the fact that soil erosion is still very serious and land degradation is still a big problem in this region. The main reason for this is that many constraining factors for soil and water conservation still exist. These factors include lack of financial and technical support, and no involvement of local land users in the decision-making process.

Stakeholder groups:

- **Govt./Project staff**
 - The Office for Soil and Water Conservation in the Yanhe River Basin, and its branches in Ansai and Baota County
 - Environment Monitoring Center for Soil and Water Conservation of Yellow River Basin
 - Institute of Sand-Control of Shaanxi
- **Public administration**
 - agriculture
 - forestry
 - land
 - water
 - livestock
 - environment
- **Research Centres and Universities**
 - Institute of soil and water conservation, CAS
 - Northwest A&F University
- **Schools**
 - Some primary and middle school for environment protection education
- **Land users**
 - Local farmers

Greece - Crete

Stakeholder SS workshops

Various stakeholders took part in the SS workshop, including farmers, village officials, scientists, teachers and various inhabitants of the study area

Stakeholder groups:

The groups of stakeholders and actors that are involved with or are directly influenced by the decision-making process are:

- The Ministry of Rural Development and Foods,
- The Ministry of Planning, Public Works and Environment
- The Ministry of Internal Affairs
- The four Prefectures of Chania, Rethymo, Heraklion, and Lasithi
- The General Administration of Crete (Periphery)
- The OADYK – Organization for the Development of Western Crete

- The OANAK- Organization of Water Resources Management of Eastern Crete
- The Union of Agricultural Associations
- The ISPOT - Institute of Olive Tress and Subtropical Plants of Chania (NAGREF)
- The Institute of Vines, Vegetables and Flowers of Heraklion (NAGREF).
- National Agricultural Research Foundation –NAGREF ,
- The Institute of Plant Protection of Heraklion (NAGREF)
- The Municipality of Agia Barbara

Greece – Nestos

Stakeholders SS workshops

Farmers and scientists

Stakeholder groups:

- Region of Eastern Macedonia-Thrace, Department of Water Management, Ministry of the Environment, Physical Planning & Public Works, is a state organization which is related to surface and ground water use, applications and management, including relevant licences.
- Prefecture of Xanthi, Administration for Land Reclamation, opines on land works and constructs as well in order to promote agricultural productivity.
- Prefecture of Xanthi, Administration for Agriculture.
- Topeiros Municipality, municipality located within the study site area.
- Democritus University of Thrace, local University among leading in Greece. The School of Engineering is located in Xanthi. It consists of the Departments of Civil, Electrical, Environmental, Mechanical and Architectural Engineering, has wide research experience in hydrogeological, geotechnical and hydrochemical studies such as: Management of groundwater and surface water, seawater intrusion in coastal aquifers, management of groundwater recharge and soil degradation.
- Traditional farmers.

Morocco

Area and people

Marginal land with much degradation, and with poor inhabitants

Stakeholders SS workshops

Farmers, local government, local centre for agricultural advice, scientists

Stakeholder groups:

- **Govt./Project staff**
 - National : The engineers and technicians responsible of the services of agriculture and forest.
 - Local technicians of the same services
- **Public administration**
 - Agriculture and livestock: Provincial Direction of Agriculture "DPA"
 - Forestry : Regional Direction of Forests "DREF"
 - Water: Hydraulic basin Agency of the Bouregreg
 - Environment: no local representation. The elected municipality council

- The local power-administration of the commune,
- **Research Centres and Universities:**
 - Mohammed V University and other schools of engineers
- **NGOs:**
 - more related to cultural activities, not really involved in development aspects
- **Land users :**
 - Farmers with a high diversity of land use, and ownership

Portugal

Area and people

Forest zones

Added value of DESIRE for stakeholders

The dialogue between actor's types which are not habit to speaking together. The exchange of point of view between various type of actors (in that case the municipality and the technicians allowed to find more complete solutions in their problem).

The exchange of experiences between two study sites and two types of stakeholders

Stakeholders SS workshops

The local stakeholders invited to the workshop were:

- members from the municipality council and parishes;
- technicians from the Forest Technical Office (GTF);
- technicians from the Municipal Civil Protection Agencies;
- farmers;
- forest associations;
- local development associations.

The external stakeholders invited to the workshop were:

- technicians from the AFN – Autoridade Florestal Nacional (National Authority to Forest);
- technicians from the CCDR-C – Comissão de Coordenação de Desenvolvimento Regional da Região Centro (Commission for the Coordination of Regional Development in Central Portugal);
- technicians from DRAP-C – Direcção Regional da Agricultura e Pescas do Centro (Regional Directorate of Agriculture and Fisheries in Central Portugal);
- national representative of the Convention to Combat Desertification;
- researcher.

Limitations for spontaneous implementation of SWC practices

Problems of ageing of the population in this zone, there is little active person so little means for the municipality.

Stakeholder groups:

AFN - Autoridade Florestal Nacional (National Authority to Forest): This body is part of the Ministry of Agriculture, Rural Development and Fisheries. Its main aims are to define a national forest policy and manage the forestry sector. It is actively involved in DESIRE with local representation,

mainly with respect to the prescribed fire activity in Góis municipality and the promotion of Forest Intervention Areas (ZIF). (<http://www.afn.min-agricultura.pt/portal>)

- **UNCCD National Focal point:** The NAP (National Action Programme) to Combat Desertification has been applied since 1999, with 5 Pilot Areas. Mação municipality is one of these Pilot Areas. A close working relation has been established during past years between members of the Portuguese participants in DESIRE and the Portuguese UNCCD focal point.
- **Instituto da Água (Water Institute):** This body is responsible for the implementation of the national water policy. (<http://www.inag.pt/>)
- **Autoridade Nacional de Protecção Civil (National Authority for Civil Protection):** Civil protection is organized at municipal, regional and national levels. In the DESIRE project, civil protection is represented at the local level, where it is incorporated into local government authorities. (www.proteccaocivil.pt/)
- **DRAP-C - Direcção Regional de Agricultura e Pescas (Regional Department of Agriculture and Fisheries for the Central Region):** This regional body is a branch of the Ministry of Agriculture, Rural Development and Fisheries and supports the agriculture and fisheries sectors at the regional and local level. (<http://www.drapc.min-agricultura.pt/>)
- **CCDR-C - Comissão de Coordenação de Desenvolvimento Regional do Centro (Commission for the Coordination of Regional Development in Central Portugal):** is the regional government board with responsibilities for the environment and planning, and with responsibilities for the management of EU and government investment in the region. (<http://www.ccdrc.pt/>)
- **Mação local government and municipal services:** Mação municipality has ultimate responsibility for the management of the district and its resources, with an active role in the planning and management of the municipality territory. Mação local government has developed remarkable efforts in forest fire prevention, detection and fire-fighting through its Forest Technical Office and Municipal Civil Protection Services. This body has been collaborating on UAVR and ESAC research projects since the 1990s and is actively involved in the DESIRE project. (<http://cm-macao.pt>)
- **Aflamação – Associação Florestal do Concelho de Mação (Forest Association of Mação Municipality):** This body was created in 2004 to promote the association between forest owners and to create so-called Forest Intervention Areas. The involvement of this association in the DESIRE project is very important since it establishes interaction between the municipality and landowners. (<http://www.aflomacao.pt/>)
- **University of Aveiro (UAVR) & ESAC:** the relationship between these institutions and the local authorities has been established for more than fifteen years and it has been built on and reinforced since 1992 through several previous common research and development projects. (<http://www.ua.pt> & <http://www.esac.pt>)

Russia – Djanybek

Area and people

Degradation problems

- Poor vegetation cover
- Overuse of natural resources
- Overgrazing

Stakeholders SS workshops

- Extension service providers
- GO-line agencies
- NGO's
- Traders

Added value of DESIRE for stakeholders

Stakeholders in the Dzanybek are interested and eager to cooperate and try new technologies. Stakeholders deeply trust the Volkzy research institute.

Alternative technologies:

- 1) green manure
- 2) drainage
- 3) drip irrigation
- 4) licorice cultivation

Limitations for spontaneous implementation of SWC practices

Drip irrigation is not yet applied because of investment costs

Stakeholder groups:

- Administration of Pallasovsky region.
- Administration of Romashki village
- Department of Hydrogeology and Land Reclamation
- Farm «Romashkovskii». Large farm, leading in sheep breeding, growing of cereals, vegetables and forage. The activities of this farm are influencing the soil and water resources of the area. Overgrazing has become a big problem for the surrounding areas; however, it is a provider of employment for the local people.
- Small farmholders.
- Holders of small vegetable gardens. Almost each family in the village is growing at their garden vegetables for own use.

Russia – Novy

Area and people

Land users:

- Small size household farming (about 1 ha)
- Stock farmers (about 100 ha)
- People living in the area are about 1500

Degradation problems

- Secondary salinization due to water table
- Poor water management practices
- Irrigation
- Soil structure decline
- Wind erosion
- Water erosion
- Productivity decline

Stakeholders SS workshops

Involvement of stakeholders with DESIRE on study site

- Representation of research state institutes on land reclamation
- Extension service (ministry of agriculture)
- Representative of agricultural association

Feedback from stakeholder workshop

- The added value of DESIRE is the SS can be the information on alternative options for land management
- Some (representative from research institutes) feel that no other technologies are needed
- An initial reaction was: "will there be any financial support?" During the workshop people become more active in the discussions and committed to work together.

Stakeholder groups:

- Administration of Saratov Region.
- Administration of Marksovsky municipal district
- Department of Hydrogeology and Land Reclamation
- Collective farms
- Small farm holders.
- Holders of personal subsidiary plots.

Spain – Guadalentin

Area and people

Most farmers are part-time farmers and of older age. They are traditional dry land farmers. Other land users are the commercial farms (often investment companies).

Current Soil and Water Conservation practices:

- Contour plowing
- Terracing
- Re-forestation (subsidized)

Investment is required for a region or at local/farm level. Government intervention required? Is it a scale issue or attitude?

Added value of DESIRE for stakeholders

The process of bringing people together; farmers with farmers; farmers with people from ministry of agriculture, etc.

Stakeholders SS workshops

There were 6 farmers (> 50 years old), scientists, agricultural cooperation representatives, local government officers (3 municipalities, regional ministry of agriculture)

Murcia has specific land management related subsidies for land users to control erosion

Limitations for spontaneous implementation of SWC practices

- Institutional limitations
- (Lack of) government support for investment in terracing
- Mosaic landscape

- Investment costs
- Knowledge

Stakeholder groups:

Land degradation in the Guadalentin affects the whole society either directly or indirectly at local, regional and even national level. Selection of the most relevant stakeholders therefore is a difficult task, but during the various research projects in the last decades it has been possible to identify the most relevant stakeholders regarding land degradation issues. Given the main objective of DESIRE to identify and evaluate existing and potential conservation measures to mitigate land degradation, stakeholders that actually make decisions on land use, either at the farm or the political level, as well as scientists, are considered the most relevant stakeholders within this project. The selection of stakeholders, in random order, includes the following groups:

- Individual farmers (both with dryland and irrigated land and both large and small properties)
- Agricultural cooperation's (e.g. COATO, <http://www.coato.com/>; COAG-IR, <http://www.arrakis.es/~coag-irm/>)
- Irrigation communities
- Representatives of the ministry of environment and agriculture at level of municipality, region and national.
- Agricultural Extension Services (Oficina Comarcal Agraria:
- [http://www.carm.es/neweb2/servlet/integra.servlets.ControlPublico?IDCONTENIDO=1287&IDTIPO=100&RASTRO=c489\\$m](http://www.carm.es/neweb2/servlet/integra.servlets.ControlPublico?IDCONTENIDO=1287&IDTIPO=100&RASTRO=c489$m))
- National focal point of the UNCCD.
- Tourist administration
- Confederación Hidrográfica del Segura (Segura basin water authority: <http://www.chsegura.es/chs>)
- NGO's (Ecologistas en acción, ANSE, etc.)
- Forest engineer private companies (e.g. Tracsa, Generala)
- Forester associations (e.g. Asociación de Propietarios Forestales de la Región de Murcia).
- Scientists (ecologist/geographer/sociologist/soil scientist)
- Fundación Instituto Euromediterráneo de Hidrotecnia, <http://www.f-ieh.com/>
- Instituto Universitario del Agua y del Medio Ambiente, <http://www.um.es/inuama/>

The abovementioned groups will be involved and consulted as much as possible during the duration of the project through questionnaires and in various workshops.

Tunisia

Area and people

This zone, where the populations live essentially on the arboriculture, the rain fed crops, and the breeding, suffers of big droughts. The problems of lands degradation in this zone are the erosion by water; the other problems are the division of lands (raise a problem for the construction of big construction) and the poverty.

Added value of DESIRE for stakeholders

Involvement in testing one or more methodologies

Stakeholders SS workshops

3 days of workshop organized in dialogue with the governor of Médenine where were present about ten researchers of the IRA, 2 NGOs (AJZ + APB) and a technician of the CRDA (service of the state). This small group visited 2 farmers on 2 different sites. Then the last day the farmers and the other participants (farmers, person in charge of association) were invited to elaborate an assessment.

Limitations for spontaneous implementation of SWC practices

Problems of workforce to maintain the building after constructions. The young peoples leave this territory to join cities.

Stakeholder groups:

The potential end users are:

National level:

- The focal UNCCD point at the Ministry of Environment and sustainable development,
- Ministry of Agriculture and water resources and particularly the divisions of Soil and water conservation, forestry, water resources, etc.
- Ministry of Development,
- Research institutions: INRAT, INGRES, IO,
- National farmer union (UTAP),
- Grazing and livestock breeding agency (OEP),
- Outreach and agricultural extension agency (AVFA),
- Universities: IRESA, University of Tunis, University of Gabès, etc.

At the regional/Local level: In addition of the stakeholders mentioned above we can add:

- Province council and particularly the regional commission for combating desertification,
- Regional directorate of the environment (south east).
- Schools (primary and secondary)

Turkey – Eskisehir

Area and people

Land use in the Eskisehir Basin is unirrigated cereals, meadows, irrigated sugarbeet and sunflower and fruit cultivation. The area is 4th among the national league with respect to agricultural production per person.

Added value of DESIRE for stakeholders

Added value of DESIRE for stakeholders in the SS is the participatory approach. There is a low level of contact between stakeholders. Organization is poor and the workshops are a help to connect farmers with farmers and farmers with researchers. In the beginning of the workshop people did not see an added value of DESIRE.

There is a gender problem; women do not join workshops. One should work through village elders. People traditionally gather and discuss in coffee houses and tea houses. Could this be used to discuss degradation and land use?

Stakeholders SS workshops

3-day stakeholder workshops were organized. On the 3rd day the GO's and NGOs were invited to participate. Half of them left during the day. Farmers are reached by the

government through workshops that are advertised in local media such as TV and radio. Farmers complain that the market prices are too high, while the price at which products are bought by middlemen is low.

Limitations for spontaneous implementation of SWC practices

A limitation to the spontaneous adaption of new methods are investment costs and low level of contact between stakeholders limiting exchange.

Stakeholder groups:

- **Provincial Division of the State Water Affairs:** The local branch of the primary executive state agency for elimination of adverse effects of Turkey's surface and groundwater and putting them in public utilization in various ways such as hydropower, irrigation, domestic and industrial use. This institution is passively involved in DESIRE since it previously constructed the Keskin Dam in the study site area.
- **Anatolian Agricultural Research Center:** A governmental organization conducting various research activities including production of drought resistant new species, amelioration of meadows etc.
- **Provincial Special Management:** The older General Directorate of Rural Services, now bound directly to local governor. It is expected normally to distribute infrastructure services such as road and aqueduct building or repair, etc.
- **Provincial Directorate for the Environment and Forestry:** Local state branch responsible for reforestation and environmental rehabilitation and protection.
- **Soil and Water Research Institute, Eskişehir Branch:** Branch of an organization (The Ministry of Agriculture and Rural Service) aiming at the development, conservation or suitable exploitation of the soil and water resources in the Eskişehir region. This institute previously made some research projects in relation to various aspects of land degradation in Eskişehir regions.
- **Eskişehir Osmangazi University, Faculty of Agriculture:** As a state university, this organization realises both education (undergraduate and MSc) and researches on productivity and land degradation issues.
- **TEMA Eskişehir Branch:** A branch of Turkish NGO for combating soil erosion, for restoration and protection of natural habitats.
- **Foundation For The Reinforcement of the General Directorate of National Parks and Game-Wild Life :** A Turkish NGO focused on the protection of environment with its wild life.
- **UNCCD National Focal point:** The national connection point against desertification founded under the Research, planning and co-ordination board of the Ministry of Environment and Forestry.
- **Tepebaşı Municipality:** Decision-maker and execution authority within the municipality boundary with respect to land management and related issues. Since the majority of the study site included within the municipality with the latest local legislative rearrangements, this organization has ultimate significance.
- **Local Irrigation Unions:** The union of villagers (end-users) for provision of surface and ground waters to their farms.
- **Local Farmer Unions:** The union of villagers for increasing the productivity of soil and and crop quality.

- **Eskişehir Agricultural Credit Cooperation:** An NGO that provides various agricultural credits to farmers.

Turkey – Karapınar

Area and people

The SS area is proposed to be the first GEO-park of Turkey. Area with this status have special ecological, environmental, educational aspects. The potential for eco-tourism is high. In a GEO-park use and protection is combined. The decision on the status of the area is expected within about two years.

Volcanic area that is associated with Cappadocia. Cereal farming and sheep farming are traditional systems. The traditional land use system is Barley-wheat(?) -wheat-fallow. The system is no longer economically rewarding enough. The GEO park idea is discussed in the stakeholder workshops.

Stakeholders SS workshops

- Local farmers

Organizations involved in GEO-park:

- Natural education ministry
- Soil and water conservation institute
- Agricultural management

Added value of DESIRE for stakeholders

Discussion of alternative farming methods and improving contact between various actors.

Discussed new farming methods

- Cage animal breeding (?)
- Drip irrigation
- Citrus cultivation
- Rotational grazing to protect pasture

Limitations for spontaneous implementation of SWC practices

The government provides funds for alternative practices but people value their own traditional systems. Only 10% adopted drip irrigation. Surplus money is invested in consumption goods and is not invested back in farming, affecting the sustainability and productivity of the farming method.

Stakeholder groups:

- **State Water Works, Konya Branch:** The local branch of the primary executive state agency for elimination of adverse effects of Turkey's surface and groundwater and putting them in public utilization in various ways such as hydropower, irrigation, domestic and industrial use. •

- Soil and Water Research Institute: Branch of an organization (The Ministry of Agriculture and Rural Service) aimed at the development, conservation or suitable exploitation of the soil and water resources.
- **General Directorate of Provincial Agriculture, Konya branch:** A governmental organization responsible for the promotion of agricultural activities within the provincial boundaries.
- **Provincial Directorate for the Environment and Forestry:** Local state branch responsible for reforestation and environmental rehabilitation and protection.
- **TEMA:** A Turkish NGO for combating soil erosion, for restoration and protection of natural habitats.
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- **Karapınar Municipality:** Decision maker and execution authority within the municipality boundary with respect to land management and related subjects.
- **Local Irrigation Unions:** The union of villagers (end-users) for provision of surface and ground waters to their farms.
- **Local Farmer Unions:** The union of villagers for increasing the crop amount and quality.
- **Ministry of National Education, Directorate of Karapınar District:** Governmental organization, authorized for the education of children from primary school to lycee.
- **Selçuk University, Faculty of Agriculture:** A developed rural university, with many raised academics, and undergraduate and postgraduates in various fields of agriculture.

Italy – Rendina

The first and major users involved in natural resource management and desertification are the Regione Basilicata, in particular the regional agency ALSIA, *Consorzio di bonifica del Vulture e Alto Bradano (CBV)* and the *Autorità di Bacino del Fiume Ofanto*, which coincide with the *Autorità di Bacino della Puglia (AbP)*. The first two showed an immediate interest in our project. They are our main two stakeholders at watershed scale.

- ALSIA (Agenzia Lucana di Sviluppo e di Innovazione in Agricoltura) – Department of services for agricultural development , Experimental Farm GAUDIANO, SS.93 Km 44.5 GAUDIANO (PZ). Email: azienda.gaudiano@alsia.it; Website: <http://www.alsia.it>. ALSIA is main regional agency of the Basilicata Region for the agricultural and food processing system and responsible for extension services and completion of Agrarian Reform. The role of the agency has been established by Regional Law n. 38/96, and integrated by other regional Law: No. 21/98, 61/00 and 29/01.
- Consorzio di Bonifica Vulture - Alto Bradano; Piazza S.M.Assunta - 85020 Gaudiano PZ. E-mail: consorziobonificavab@libero.it. Public consortium. Total surface: 2000 km² (including Rendina Basin). Public institution, established under National Law (regio decreto 13 febbraio 1933 n. 215) to coordinate public intervention and private activities in matter of land reclamation. Competences of the consortium are Hydraulic structures, and Water management for irrigation. The consortium is responsible for the management of the Rendina Dam (Lavello–PZ).

Local technical (agrarian/environmental) schools contacted for dissemination activity (seminars initiated in the 2008) :

- Agrarian and Environmental Professional Institute. Genzano di Lucania (Potenza) Italy
- Agrarian Technical State Institute Lavello (Potenza) Italy

Land users¹: there are several local representatives of the national farmer association and farmer's unions working locally to support associated farmers in various aspect related to agricultural development and promotion of local production, technical, legislative, fiscal assistance, EU policy implementation and relationships with National and regional authorities and policies. The main farmer associations are:

- CIA (Confederazione Italiana Agricoltori): Italian farmer association with 900.000 members at national level and with capillary distribution at local regional scale. Founded in the 1977. Local representative is CIA-BASILICATA; Via Pascoli, 25 , 85024 Lavello <http://www.ciabasilicata.org> . A branch of CIA is AGIA -Associazione dei Giovani Imprenditori Agricoli (young farmers association; www.agia.it)
- COLDIRETTI (www.coldiretti.it): Italian farmer association at National level and with capillary distribution at local regional scale. Founded in the 1946. Based fundamentally on Christian Catholic principles.
- COPAGRI (Confederazione Produttori Agricoli): farmers's union founded in the 1990's, that has regional and provincial distribution in Basilicata (<http://www.ssabasilicata.it/COPAGRI>).

Mexico - Cointzio

Area and people

Many farmers are only part-time farmer

Stakeholders SS workshops

In Mexico, stakeholder workshops were combined with ongoing projects in which stakeholders were involved (see Desire report 65).

Stakeholder groups:

- Govt./Project staff
- *Local*
 - Comisión de Cuenca del Lago de Cuitzeo. Cuitzeo, Michoacán (CCLC) and Comisión de Cuenca del Lago de Patzcuaro, Patzcuaro, Michoacán (CCLP)
 - Municipalities of Morelia, Lagunilla, Acuitzio del Canje, Huiramba and Patzcuaro

¹ We noticed during meetings with farmer's unions (June and September 2007) that the willingness to cooperate was really low: they declared themselves not available for meetings, questionnaires and other time-keeping activities at least until the end of 2007 (Year Of Desertification), claiming that they were already under much too pressure to accept further activities. We decided to leave the problem aside and wait for users to change attitude. In order to achieve some sort of surrogate for the deliverables of the missed meetings we contacted and interviewed a series of farmers in an informal way, sometimes in the field. Only in December 2007 we observed a change of attitude when the president of the *Associazione dei Giovani Imprenditori Agricoli* (AGIA) of Basilicata declared interest in our work. Consequently, we started the organization of a meeting with selected users (February 2008 and November 2008) dedicated to find ways to raise the interest of a larger group of users (including farmers) towards our efforts (workshop realized also with the support of CBV and ALSIA).

- **Public administration**

- ***Agriculture***

- SAGARPA: Secretaria de Agricultura, Ganaderia, Desarrollo Rural, Pesca y Alimentación (SAGARPA) <http://www.sagarpa.gob.mx>

- ***Forestry***

- **Comisión Nacional Forestal (CONAFOR)** Morelia, Michoacán <http://www.conafor.gob.mx>

- ***Land***

- **SAGARPA, SEMARNAT + Government of Michoacán + municipalities**

- ***Water***

- **Comisión Nacional del Agua (CONAGUA)** Morelia, Michoacán <http://www.cna.gob.mx>
 - **Organismo Operador de Agua Potable, Alcantarillado y Saneamiento de Morelia (OOAPAS)** Morelia, Michoacán <http://www.ooapas.gob.mx>

- ***Livestock***

- **SAGARPA: Secretaria de Agricultura, Ganaderia, Desarrollo Rural, Pesca y Alimentación (SAGARPA)** <http://www.sagarpa.gob.mx>

- ***Environment***

- **SEMARNAT: Secretaria del Medio ambiente y Recursos Naturales (SEMARNAT)** <http://www.semarnat.gob.mx>

- **Research Centres and Universities**

- **Universidad Nacional Autónoma de México (UNAM), Centro de Investigaciones en Geografía Ambiental (CIGA)**, Morelia, Michoacán <http://www.ciga.unam.mx>
 - **Universidad Nacional Autónoma de México (UNAM), Centro de Investigaciones en Ecosistemas (CIEco)**, Morelia, Michoacán <http://www.oikos.unam.mx>
 - **Universidad Michoacana San Nicolas de Hidalgo, Instituto de Biología**, Morelia, Michoacán <http://www.umich.mx>
 - **Colegio de Postgraduados**, laboratorio de Fertilidad de suelos, Texcoco, Estado de México. <http://www.colpos.mx>
 - **Universidad Autónoma de Chapingo (UACH)- Centro Regional Universitario Centro Occidente (CRUCO)**, Morelia, Michoacán <http://www.cruco.org>

- **NGOs / Community based organizations**

- None NGOs.
 - Some rural communities of Morelia and Acuitzio del canje.
 - “Ejididos” (sort of cooperatives: land belongs to the State but uses given to the families, elected direction, monthly meeting, collective works and decisions for some collective interest problems)

- **Companies**

- None
- **Media (journalists)**
 - Contacts with local medias (newspapers, radios, TV). One radio on 5 in Morelia, is managed by the University UMSNH.
- **Schools**
 - Schools of some of the rural communities
- **Land users**
 - "Ejidos"
 - Farmers of the study area

References

Grimble, R. and Wellard, K. 1997. Stakeholder methodologies in Natural Resource Management: A review of concepts, contexts, experiences and opportunities, *Agricultural Systems* 55: 173-193.

Ramírez, R. 1999. Stakeholder analysis and conflict management. In D. Buckles (ed.) *Cultivating peace: Conflict and collaboration in natural resource management*. Ottawa, Canada: International Development Research Centre: http://www.idrc.ca/en/ev-27971-201-1-DO_TOPIC.html.