

Key message

It is the purpose of this policy brief to stress the importance of resilience in climate change policies and to outline policy recommendations that aim at incorporation of community based resilience building into national, regional and local level climate change, development and natural resource management policies.

In recognizing that climate change is just one among many factors that can cause lack of resilience, fieldwork demonstrations have provided practical tools for using this theoretical concept to integrate climate change adaptation not only in national strategies but also in the strategies and plans at local and watershed levels. The concept of resilience is made more concrete through watershed level application and by addressing the different components that shape it.



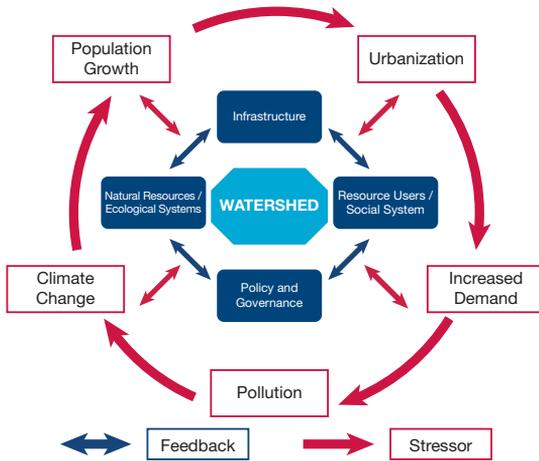
Recommendations

- Climate change is not the only problem local vulnerable people are facing. Lack of resilience of local communities is mostly caused by a mixture of several factors and problems, such as climate change, environmental degradation, poor infrastructure, overpopulation and poverty. For any climate change policy to be successful in aiding the country, it must seriously consider the best ways to be implemented which will not only consist of minimizing the impacts of climate change but doing so while aiding the improvement of various other national interests, namely the socioeconomic sector, education, and women empowerment.
- Participatory approaches promote better decision making and help bridge the gap between national and local level implementation. Involving the main actors at all stages and scales through dialogue and consensus building will create trust between stakeholders. Win-win solutions that provide mutual benefits will in turn enhance a greater sense of ownership for the decisions made. Along with scientific and technical knowledge, local knowledge is essential for successful adaptation. Adaptation to climate change begins at the local level. Policy should therefore take local knowledge into account to ensure sustainable adaptation.
- Even with the local knowledge being supported by scientific and technical assessments, and the capacity to adapt, locals look for physical projects to implement on the ground that help reduce the negative impacts of climate change, increase ecosystem resilience, and improve their socio-economic conditions on the ground. Pilot projects should stem from development of an adaptation plan at the community level that includes the four strategies forming the main components of resilience. Evidence from SEARCH and earlier initiatives suggests that these are: diversity, sustainable infrastructure and technology, self-organization, and learning.
- Resilience is a relatively new issue for the climate change and water sector. Generally, there is a lack of awareness throughout the sector and the general public of the concept and its application. Success in applying resilience building approaches therefore depends greatly on the initial determination to 'get started'. Furthermore, ensuring effective stakeholder dialogue requires good and transparent facilitation by well-trained facilitation teams. These teams generally require time, skill and perseverance to build relationships with stakeholders, to increase awareness, and to overcome resistance to change.
- Scaling up of success stories remains a challenge. To build climate resilience at the country or basin level, policy makers must figure out how to integrate success stories from local level project implementation into more strategic planning instruments at broader scales. Policy coherence is also needed in relation to water, agriculture, environment and climate change. Adopting a rights-based and participatory approach to the water and agriculture policy and related investments should be pursued and so should development of integrated resilience strategies for the rural sector.

Justification

Climate change is affecting livelihoods of people all over the world. For the weak segments of society climate change is just another stressor to their struggle to survive and make a decent living (Figure below). Therefore, strengthening the resilience of the most vulnerable groups should be at the heart of any climate change policy and action. The need is to provide better climate change policy and planning in an integrated, transparent and participatory manner at different levels and to improve climate change governance for a well-functioning, healthy society at large. A key element in well targeted and effective climate adaptation planning is participation of all relevant stakeholders, across sectors and scales, throughout the whole process of setting up and implementing adaptation strategies.

Watershed Social and Ecological Functions and Stressors



There is a gap between these ambitious ideas and realities on the ground. At the one hand, there are national climate change adaptation policies, generally described in a theoretical way; there are also other sectoral policies for e.g. water, agriculture, forestry, fisheries. On the other hand, there is the ground level where farmers and other rural people try to adapt to climate change and other changes that put stress on their livelihoods. In between these levels much can be done to increase resilience of communities, provinces, governorates and watersheds. But tools to do so are in development and not well-established.

In the period 2011-2013, the SEARCH project obtained good practical examples on how to strengthen resilience through learning and piloting practices with the full participation of all the relevant stakeholders. These included policy makers, government practitioners, civil society, environmental groups, women, and citizens in five Southern and Eastern Mediterranean countries, namely Jordan, Palestine, Lebanon, Egypt and Morocco. These experiences have resulted in the preparation of a Toolkit to Provide Guidance and Recommendations to Integrate Climate Change Resilience into National Policy and Strategies.

The essential quality of resilience is the capacity of societies and ecosystems to withstand shocks and rebuild when necessary. Resilience consistent with poverty reduction is the capacity to cope with shocks and stresses and to sustain transformations needed to reduce poverty under global change, including climate change.

Evidence for action

Some of the practical examples on how to strengthen resilience collected by SEARCH are presented here as

evidence for action. These are not limited to the specific countries and sites mentioned. Similar examples can be found across the region.

Coordinate adaptation with other national priorities

Excluding climate change, the nature of the watershed and the poor infrastructure in Marj Sanour (Palestine) are at the source of a flooding problem. In addition to improving economic services and implementing physical projects on the ground, increasing resilience also requires significant efforts to strengthen socio-cultural conditions, awareness and learning for improving the adaptive capacity of communities and institutions. Self-organization and adaptive governance were central to the SEARCH Partnership's resilience framework, to allow for effective and dynamic stakeholder involvement. The 'rules of the game' for building more resilience should be adaptive, i.e. changeable over time, according to the changing needs of these stakeholders. The principle of accountability lies at the heart of genuine partnership and participation in climate change adaptation. Accountability should be primarily toward those who are vulnerable to and affected by climate change impacts.

Climate change initiatives ought to consider their impact on other national interests. Dealing with climate change offers countries in the Mediterranean Region an opportunity to not only help the environment but also promote women's rights, the water and health sectors, and socioeconomic standing in poor communities. While the national policy of Jordan or Egypt do an excellent job at describing the many such important programmes or strategic plans outlining steps towards adapting to climate change and preventing further negative consequences, these may also benefit from increased local and individual level initiatives. The current strategy legislation and action plans outlined are mostly either under development or just newly adopted. It is likely that the actors involved will need time to become settled before they are ready to perform their plans, taking many years to reach the local level.

Foster local knowledge and participation

Traditional techniques of natural resource management and adaptation to climate variability are no longer practiced. Traditional knowledge is seriously affected by a general acculturation due to poverty and socio-cultural changes. Still, local people mostly have an accurate understanding of the changes affecting them and what a valuable adaptation idea is. Supporting local knowledge alongside the scientific and technical one can improve local people's understanding of what is happening and help find the most appropriate adaptation strategies. The impacts of climate change are also more easily fought at the local level. Many climate change initiatives work to help families socioeconomically. Since it is in the best interest of the community members to be able to adapt to

changes in climate, they are most likely to see adaptation initiatives through, implementing them even after climate change organizations have left the community. Thus, climate change adaptations at the local level can help decrease the negative impacts of climate change more quickly.

Higher-level climate change initiatives can focus primarily on dissemination of information. Modest efforts and steps are taking place in scientific research related to climate change mitigation and adaptation in the agriculture sector in Egypt, such as changing sowing dates, crops or irrigation practices. It falls on higher-level institutions as outlined in current national policies to inform as many people as possible as to the consequences of climate change. Replication of the SEARCH approach in other areas, and clear instructions on the methodology can help this process of awareness-raising on climate change at all levels, and so can accelerating access to data and information, and knowledge to all stakeholders. Linking SEARCH with other climate change projects in Egypt is contributing to sharing of lessons learned, improving environmental education, and promoting and enhancing research in climate change.

Design and implement sustainable adaptation plans

Community participation in planning and decision making processes is key for making real change in the lives of people. Community participation is key also in the implementation of climate change initiatives. Encouraging the participation of the private sector and civil society can provide support for innovative ideas to adapt to climate change. This can lead to mobilization of resources to address climate change and expansion of the use and implementation of low-cost technologies. Besides, there is a critical need to revitalize and consolidate local institutions to foster peace, stability, democracy, justice, sustainable development and the protection of human rights.

In Morocco, each rural municipality has to develop a Communal Development Plan (CDP) through the participatory approach. Publishing of a manual promoting integration of resilience and elements of the SEARCH Toolkit in territorial planning is contributing to efforts by also other institutions to promote introduction of climate change considerations in CDPs.

Facilitation to support climate change action

To 'get started' with resilience, raising awareness about the conditions of vulnerability and the best interests of the community is critical. Gaps in capacities need to be identified and addressed early on and a capacity building strategy should be developed. Community outreach to spread awareness on climate change will allow for immediate action while the various bodies that will eventually regulate climate change initiatives are still being formed. This will ensure that no time is lost and the negative impacts of climate change are relieved or stopped quickly without causing further disruption to the environment. However, the legislative bodies are just as critical to combating climate change and will ensure the sustainability of community based projects. It is also crucial to engage leaders to support and communicate the process. The minister of water resources, the head of the water authority, and leaders of businesses and non-governmental organizations among

other examples can play a critical role in defining and communicating the set of core values that will guide adaptation and catalyze the process.

Local communities may be unaware of what climate change effects are or the fact that changes at the individual level can help to stop the negative impacts of climate change. This has been found to be critical to the overall climate change situation in Jordan. If the local people are not aware of how their specific actions work to either increase or decrease the negative impacts of climate change, then Jordan cannot hope to see any success from implementing policies regarding climate change. For the country to see the adverse effects currently noted as a result of climate change come to a stop, action must start at the local level. SEARCH technical teams have constituted a real platform for joint learning between stakeholders around project coordinators and have proved very efficient in conducting the process internally and on the field, including facilitation of workshops and meetings with local communities and other stakeholders at different sub-national levels.

Integrate and innovate across sectors and scales

To integrate success stories into strategic planning, initiatives such as SEARCH should be reviewed as part of the process of compiling National Communication reports to the UNFCCC. These reports can serve as a baseline for the selection of priority adaptation strategies for the most vulnerable sectors. Following national strategies and plans, SEARCH has initiated pilots of aromatic and medical plant (AMP) domestication and cultivation in a region of Morocco known for its overexploitation of natural resources and where AMP cultivation is not practiced. In addition to the main target sectors of agriculture, forestry and water, other projects related to climate change being implemented in Lebanon are evaluating the migration of invasive species to the Mediterranean as accelerated by climate change consequences, estimating fire risk in future climatic conditions by using projected climatic data, and assessing pollen seasonal variation under different climatic conditions.

SEARCH demonstrated that combining immediate community-based interventions that set up a sustainable adaptation plan for climate change at the local level supplemented by higher-level regulatory and informative institutions is the best way to ensure that the impacts of climate change are diminished as much as possible. This policy works to solve the problem in the short-term with community based work while also ensuring the sustainability of local adaptation plans with regulatory bodies. This will make sure that countries can stop the negative impacts of climate change as rapidly as possible while also creating a strong foundation for protection against climate change in the future. National adaptation coalitions can play a key role in catalyzing innovation as well. They can create opportunities for innovation and develop into an effective network of innovators working for climate change adaptation. Encouraging innovative, entrepreneurial behavior could be a main task for these coalitions.

Examples from the field

In Jordan, after analysis of various sectors impacted by climate change, SEARCH drew up adaptation as well as implementation plans for each of the three demonstration communities to match the four main categories of resilience. The main goal of diversity initiatives is to ensure that communities have various outlets of income that are adaptive to climate change. Sustainability focuses on strengthening technology and infrastructure in local communities to address future climate change problems. Organization goals are mainly focused on maintaining community participation in building resilience. Learning goals work to ensure that the community has the necessary skills to curb climate change as well as efficient ways to keep updated on new climate change information.

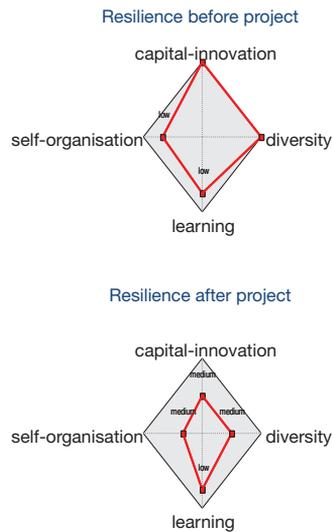
In Palestine, SEARCH worked with the local community to advance towards the shared vision of improving conjunctive use of both ground and surface water, in order to improve the agricultural sector, by building possible scenarios for resolving problems and finding ways to help the local community advocate for their adaptive management rights.

In Lebanon, SEARCH established a hub for awareness and ecotourism, developed a public garden as a tool for forest conservation and community development, and further identified three pilot projects to be of extreme priority for implementation, namely rehabilitation of water tanks for sustainable agricultural purposes, women empowerment in the same village, and promotion of alternative income-generating activities to upgrade livelihoods.

Through SEARCH, the local community and all relevant stakeholders in Egypt have clearly identified the problems they are facing, and have therefore reached a clear long-term vision for their water districts. Being highly dependent on agricultural production, both water districts where the project worked are currently combating agricultural production loss. With a high population growth rate and an increase in yearly temperatures, popular crops are no longer able to cope with climatic changes and other drivers of change. Other impacts include the spread of numerous livestock diseases and the increase in water salinity.

In Morocco, SEARCH reconciled the initially different visions of people from the agricultural and agro-forestry sectors into a vision whereby all villages have access to domestic water supply and road, and natural resources are sustainably managed and new green economic activities are created. The main pilot actions undertaken as per adaptive strategy have been in the area of domestic rainwater harvesting and domestication and cultivation of aromatic and medicinal plants.

Overall resilience shift in pilot site of Morocco

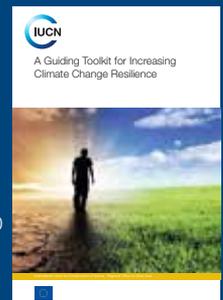


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About SEARCH

Social, Ecological & Agricultural Resilience in the Face of Climate Change[®] was a three year EU funded (2011 - 2013) regional project led by the IUCN – Regional Office for West Asia and implemented in partnership with ten organizations (CEDARE, PHG, AWO, CEOSS, UAWC, BDRC, SPNL, MADA Association, Abdelmalik Essadi University) from the five countries of Jordan, Palestine, Lebanon, Egypt and Morocco, and supported by the IUCN Global Water Program in Switzerland and the Centre for Development Innovation (CDI) - Wageningen in the Netherlands.