

Adaptive Governance Policy for Societal Resilience and Community Empowerment

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This paper reviews current thinking on flexible policy-making and participatory methods to empower communities to handle the challenges of climate change and other global shocks. Adaptive Governance for Resilience—designed to effectively increase societal resilience to external shocks while facilitating wellbeing and reducing both poverty and environmental degradation—is an innovative approach which teams cutting-edge policy-making with community empowerment. Using a 9-step methodology of the Adaptive Governance Cycle, resilience in communities can be strengthened as the communities are themselves empowered to increase wellbeing, address poverty alleviation, and strengthen environment protection. The approach facilitates governments to partner with local communities to calibrate the coordinated mix of flexible, adaptive policies to facilitate community resilience through participatory action. The author sees expanded use of Adaptive Governance as an approach for maintaining good governance and building social capital in the face of external and internal pressures and uncertainties which may become more widespread in the future.

Keywords: policy development, wellbeing, adaptive governance, resilience, sustainable development

The now-famous term “Gross National Happiness” of the King of Bhutan, King Jigme Singye Wangchuck, used first in 1972 has prevailed. He stated, “Gross National Happiness is more important than Gross Domestic Product”. Forty years later, governments in Europe and Asia have begun to discuss the need for national wellbeing strategies as overarching policies to see that governments deliver what citizens really need in the long term (Hall, 2015). Development policy-makers and planners must have an integrated approach giving equal importance to non-economic and non-material aspects of social wellbeing. In 2011, the United Nations (UN) unanimously adopted a General Assembly Resolution, calling for a “holistic approach to development” aimed at promoting sustainable happiness and wellbeing. This was followed in April 2012 by a UN High-Level Meeting on “Happiness and Wellbeing: Defining a New Economic Paradigm” designed to bring world leaders, experts, civil society, and spiritual leaders together to develop a new economic paradigm based on sustainability and wellbeing. Even if all agree with the need to achieve sustainable development, it is important to understand that there are varying motives and objectives.

Key to delivering wellbeing and health sustainably is ecosystem services, indispensable to people everywhere. In addition to providing life’s basic needs, changes in the flow of ecosystem services affect livelihoods, income, local migration, and societal conflict. The resulting impacts on economic and physical

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security, freedom, choice, and social relations have wide-ranging and interdependent impacts on well-being and health. For example, over half of the world's population continues to rely upon solid fuels for cooking and heating. These fuels including wood, crop stubble, and animal dung are a direct product of ecosystems. Alternative uses of dung or trees have significant impact on well-being. Indoor air pollution potentially produced by the combustion of these biomass fuels as well as coal in poorly ventilated heating and cooking environments, causes significant mortality and morbidity from respiratory diseases, particularly among children. Dung as fertiliser and soil improvement or trees as erosion and flood control would lead to other outcomes for the poorest. Policy-making for sustainability and wellbeing is thus extremely complex and hard to foresee from the national or international horizon. It requires local contextual sensitivity, follow-up and adjustment which are not currently practiced. Compounded by unpredictable effects of climate change and instability of finance, health, security, migration, and supply-chain systems, conventional national policy-making's ability to deliver top-down societal resilience to the degree expected by citizens is doubtful. A new way of looking at policy formulation is needed which in itself builds the social capital needed for societal resilience to system shocks.

Resilience was originally defined as the ability of a system to withstand disturbances and remain within the same stable ecological regime (Holling, 1973). It has later been applied in social science defined as the "transition probability between states as a function of the consumption and production activities of decision makers" (Brock, Mäler, & Perrings, 2002, p. 273) or "the ability of the system to withstand either market or environmental shocks without losing the capacity to allocate resources efficiently" (Perrings, 2006, p. 418). Combined with the concept of institutionalism (North, 1996), social systems that learn and experience, solving new challenges have been shown to have an adaptive capacity or resilience (Berkes & Folke, 2002). A component of resilience, the adaptive cycle, originally conceptualised by Holling (1986) interprets the dynamics of complex ecosystems in response to disturbance and change, moving slowly from exploitation (r) to conservation (K), maintaining and developing very rapidly from K to release (W), continuing rapidly to reorganisation (a), and back to exploitation (r).

As resilience research moved from ecological systems to include social dimensions and later social systems, they were referred to as Social-ecological Systems or SESs (Berkes & Folke, 1998). More social scientists adopted this SES approach and the inherently transdisciplinary field of SES researchers has focused on resilience of SESs and ways to govern resilience of SESs. Ostrom researched on the commons approached from an SES perspective where natural resources and social systems have equal representation and equal detailed analysis (Anderies, Janssen, & Ostrom, 2004; Ostrom, 2009). Policy-makers are often faced with problems of complexity, uncertainty, change, and fragmentation. The response to this is the call for flexible, ever-learning, adaptive governance of the SES.

Adaptive Policy Approach to Societal Resilience

There have been numerous attempts to use sector policy to achieve social wellbeing, deal with multi-dimensional poverty, and retain or restore ecosystem services. While recommending specific actions as a priority intervention, these single sector approaches do not bring a cohesive and integrated "holistic" approach into mainstream to dealing with the wellbeing environment interconnection into a broader set of development policies and planning. Given the cross-cutting nature of wellbeing and its opposite—poverty—which both cut across economic sectors, geographic and administrative boundaries, and time scale, it is essential that natural

resource management, poverty reduction policies, and wellbeing strategies are formulated as part of broader policies for sustainable development. Implementing specific one-off measures geared to localised problems, specific economic sectors or population subgroups may be effective in certain circumstances, but in the long run, a project-based approach to integrated development planning and financing may not produce the scale of results that is needed to meet long-term objectives. In this respect, efforts to formulate a coherent set of national sustainable development objectives will need to be supported by a cross-cutting, integrated policy approach that allows geographic diversity. Policy formulation requires a good understanding of the issues, clear policy goals, a system of performance monitoring, and policy options. Having this level of information at the national level is however challenging and local/regional specificities do not allow homogeneous policy application.

Adaptive governance is an emerging research framework for analyzing the social, institutional, economic, and ecological basis of multi-level participatory governance so as to build resilience for the immense sustainability challenges connected to more complex and adaptive SES (Folke, Hahn, Olsson, & Norberg, 2005). Most research has been on case studies of sub-national and transnational jointly managed resources—"the commons", stakeholder dialogue, and policy adjustments. Human institutions encourage dialogue between different levels of government (local, regional, national, and international) to govern common resources, while involving a broad set of stakeholder perspectives, e.g., from civil society and the population. The adaptive governance approach is a predominantly "bottom up" strategy, focusing on community-based actions and multi-level dialogue. However, insufficient research has been done in the social science on multi-level governance in transitioning society to resilience (Janssen, 2011). The prerequisites for adaptive governance are integrated, forward-looking analysis, broad stakeholder involvement across scales and monitoring systems of performance which automatically activate adjustments in policy. In order to cope with the uncertainties, shocks, and unknowns, adaptive governance of complex SESs requires the ability of self-organization and social networking capacity of communities, decentralizing decision-making, encouraging diversity in policy response, and permanent mechanisms for formal policy review and continuous learning (Swanson & Bhadwal, 2009).

Mainstreaming adaptive governance for resilience can be seen as requiring three levels of intervention. The first level consists of making development efforts consciously aimed at increasing wellbeing of those with low wellbeing, reducing social vulnerability while avoiding continued destruction of ecosystem services. This can be seen as strengthening the knowledge base for such interventions, addressing the opportunities, and increasing the overall resilience of the country and population. The second level is about ensuring that sustainable development is considered in the decision-making of relevant government agencies so that policy measures catering to sustainability are developed. This means not only environment protecting policies but also those addressing the potential creation of increased wellbeing with eco-livelihoods supporting the regeneration of ecosystem services in differing geographical areas. The third level calls for specific policy measures targeting issues that the first two levels have not yet tackled. Each of these levels requires changes in the way, government deals with policy-making, budgeting, implementation, and monitoring at national, sector, and subnational levels so that wellbeing is augmented and social capital is created. Adaptive governance for resilience must be a flexible response to policy change requirements based on the real needs of those with low wellbeing to improve their quality of life while strengthening the ecosystem services around them to secure their long-term well-being and livelihood.

Tools for Adaptive Government Policies for Resilience

To facilitate creation of adaptive policies for resilience to address low wellbeing and environmentally-related poverty, a set of policy tools is needed. The three key policy tools are:

(1) Establishing country- and district-adapted integrated and forward-looking participatory and empowering methodologies for policy analysis: use permaculture analysis and integrated solutions to increase social well-being, include scenario planning, and create action-oriented and decisive multi-stakeholder deliberation and community dialogues to avoid pitfalls and unintended policy consequences;

(2) Policy advocacy partnerships: build up multi-level domestic capacity and ally with local like-minded civil society in-country;

(3) Creation of in-country monitoring of key performance indicators to trigger automatic policy adjustments and build an evidence base to support the local communities to help the poorest individuals and families.

These tools are the basis of flexible adaptive policy creation. They require coordination among state and district governments, civil society, the private sector, and the local communities. The particular requirements of each policy tool are described below.

Tool 1: Participatory and Empowering Methodologies for Policy Analysis

Using a policy analysis process in a participatory way to empower local stakeholders to learn, offering a way to generate local/indigenous policy analysis in the midterm as well as local development scenarios and solutions. Communities and policy-makers can jointly partake in the immanent learning and capacity building experience. Integrated and forward-looking analysis requires comprehensive investigation with both historical review and forecasting leading to scenario planning. A scenario planning approach demands understanding of important factors and risks from uncertainties that could affect policy performance. Policies created using a scenario planning approach are tested against a set of scenarios and contingency plans. Adaptive policies are robust enough to work in all plausible scenarios. If conditions develop which create scenarios which “break” the policy, so-called “triggers” to adopt alternative policies or contingency plans are set off, preferably automatic adjustment mechanisms. Community dialogue needs to dovetail into multi-level and integrated deliberations with the scales of governance involved and other key stakeholders. Policy-makers and their local representatives need to fully understand local conditions and history, unexpected trajectories of preference, and social response to change. Thus, not only opinions and different perspectives are of interest but unexpected sources of knowledge, e.g., local and historical data that do not arrive through standard channels. The added value of such broader dialogue fora is to build trust, consensus, and identity among stakeholders and policy-makers. This collaborative learning process needs professional facilitation but participation must otherwise be representative, voluntary, transparent, and meaningful.

Tool 2: Policy Advocacy Partnerships

The adaptive policy cycle requires active participation, dialogue, and learning continuously. For this dynamic to occur, there needs to be a balance between civil society and community structures and that of the state. Change happens mainly within communities and organisations, and that it comes from shifts in relationships of power and accountability. Openness on information and transparency supports citizen agency and good governance. However, in many countries, there are no dialogue partners for resilient communities and the dialogue quality between the central state and local communities is not possible. Thus, partnerships with

national and district-level civil society which focus on resilient communities are needed. Creating this requires some additional interventions. There are often existing social and environmental NGOs (non-governmental organizations) in-country which can be supported and their members further trained to support a domestic transition to resilience. Such individuals and organisations should be involved in policy advocacy partnerships as well as any interventions in-country to guarantee continuity of support and domestic networking.

Tool 3: Joint Monitoring, Learning, and Adjustment

Adaptive governance for resilience focuses on enabling policy-makers and government outreach services to work with and through local communities. Local communities need to participate in selection of indicators and their monitoring. Real-time feedback loops from those most affected are key to quick adjustment and fine-tuning. Planning the monitoring system needs to be understood and accepted by the communities so that the system contributes with structured experiential learning. If they participate actively in these goal-oriented processes where mutual learning takes place among those stakeholders, critical adjustments in projects and policies can be suggested early on. Recalibration or even automatic dismantling of policies should be directly connected to the monitoring system.

Designing in Adaptivity to Cope With Uncertainties

While use of these above-described three tools is a good basis for effective and adaptive policy for building resilience, they are not enough. Adaptive policies need to strengthen the policy environment to respond to unforeseeable situations that happen during the policy cycle. Healthy complex adaptive systems have other characteristics of resilience which good policy and processes can encourage.

Adaptive policy needs social capital and one show of social capital is self-organisation without external inputs, which often surfaces in crises. Self-organizing capacity is a free good that can be valuable in producing innovative solutions to problems. Policy should not directly try to encourage self-organization but instead remove barriers to self-organisation by encouraging and supporting social networking. Policies must safeguard that they never destroy social capital.

Decentralisation to the lowest juridical unit is important to shorten feedback loops and ensure that policy is created and implemented with as much correct and precise information as possible to achieve desired results. Decentralisation can mean devolution of power to a lower level and deconcentration of decision-making to dispersed field offices. In those cases where diverse local conditions impact on policy results, decentralisation is essential and facilitates community dialogue. Decentralisation focus can be effectively combined with a national integrated adaptive policy approach for resilient communities where supportive learning networks can be coupled with informed strategic interventions and support is provided for the replication of the best practices and success stories and efforts in scaling up.

Diversity of policy responses is the logical continuation with decentralisation and uncertainties of complex adaptive systems. A greater number of experiments will logically increase the chance of finding effective solutions. In some areas and regions, this might be eco-system restoration or provision of clean and more accessible water while in other areas, it may be transiting to agro-ecological practices and organic agriculture. In other regions, it might be investing in new renewable energy technologies or providing access to investment monies. Policy pilots could be a unique mix of several of these types of interventions. The important thing is that each community and region need to look at the most immediate and intense challenges that they face along

with those things that might bring them the most value initially and then develop a comprehensive holistic plan accordingly. To facilitate diversity of responses, hindrances to creative solutions such as lack of awareness, education, inequity, lack of resources, and appropriate institutional structures and governance mechanisms need to be alleviated while innovation and local capacities need to be encouraged with subsidies and information.

Reviewing the relevance of current policies and piloting test policy instruments are part of a learning process required to adjust policy to continue to be effective. Systematic or regularly scheduled formal policy review is a mechanism for identifying and dealing with unanticipated and emerging conditions not known at policy inception. Experimental policy pilots can then be designed to test the likely impact of a potential policy, impact pilots, or to test processes related to implementation, process pilots.

Community Empowerment for Adaptive Governance

Using the local community (rural village or urban neighbourhood) as the main vehicle to address environmentally-related poverty offers great potential for scaling up successful policy pilots to national policy but presents some challenges as well. Communities are seldom uniform throughout a country. Ethnical and cultural differences, geographic variations, and social diversity require that policy implementation is adapted to each particular situation by extension services interfacing with the local context. Recreating social cohesion previously eroded by exposure to and dependence on the globalised culture and foreign concepts of individualism make the restoration of community interdependence a challenge. However, using the community as its own local experts, social workers, and internal change agents is by far a more promising methodology for sustained and comprehensive impact that should be pursued. Thus, adaptive governance for resilience focuses on the community empowerment and national policy reform in concert to make significant strides in increasing local social wellbeing and social capital, combating environmentally-related rural poverty, and strengthening ecosystem services.

Adaptive policies for resilience need to support four change enabling strategies in parallel:

- (1) Rekindle Community Social Cohesion;
- (2) Empower Communities to Affect Change;
- (3) Prevent Further Degradation of Ecosystem Services;
- (4) Increase Social Wellbeing/Alleviate Poverty Through Regenerative Livelihoods.

These strategies require empowering the local level and increasing interaction within and between the communities. The sectoral delineation of responsibilities for social mobilization, natural resource management, and enterprise development does not resonate with a communities-based perspective. Synergy and coordination between the above-mentioned strategies and their activities solicit fundamental change in how governments work with the communities. Brokering the best opportunities to the greatest need, the community is best suited to determine the optimal choices to raise the general level of welfare of the community as a whole which indirectly benefits all inhabitants. Adaptive and flexible policies will facilitate the community empowerment to take action while policy-makers and communities will jointly learn what the most effective choices are to achieve policy goals.

The Adaptive Governance Cycle for Resilient Communities

The Adaptive Governance Cycle (see Figure 1 below) for resilience contains nine steps for strengthening resilient communities by participatory and adaptive governance at the community, district, and national levels.

At the community-level stage, the cyclical process starts with shifting perspectives, planning a new pathway together, and acting to change structures to allow for this pathway. At the district level, it is important to disseminate the best practice, involve all actors, and inform upwards to obtain supportive policies. Finally, national policies supportive of resilient communities are introduced, impact of this shift is coordinated, nation-wide policies are reviewed and adjusted.

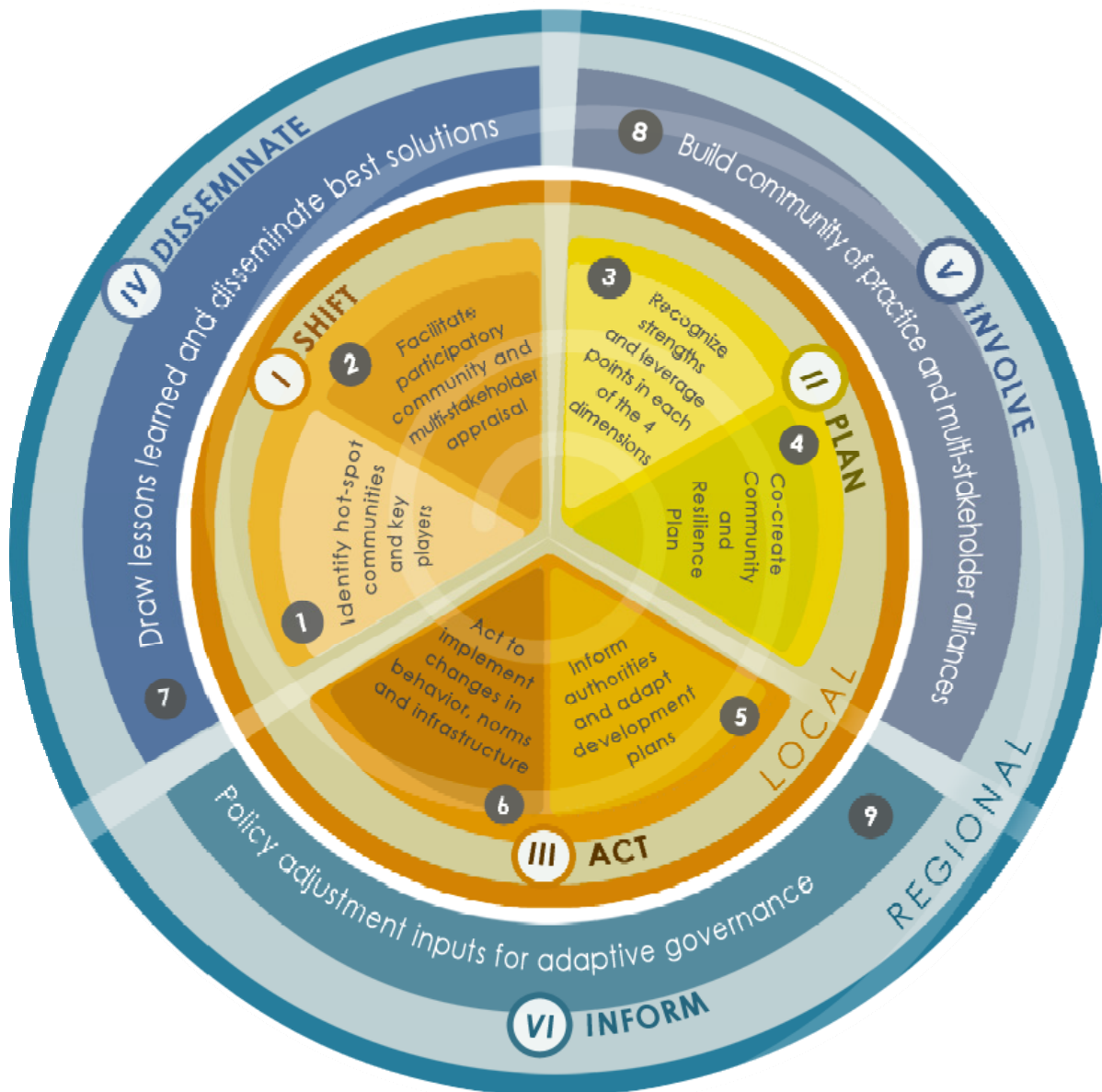


Figure 1. The 9-step process of the Adaptive Governance Cycle.

Starting at the community-level, the cycle facilitates the mobilisation of the community.

Shift Perspective

The first step begins by identifying key resources, stakeholders, organisations, and hot-spot communities/districts where efforts should be focused. Geographic focus is initially preferred limiting efforts to

one district or province. Participatory rural appraisal of the selected communities needs to be an integrated natural resource emphasis as well as self-analysis involving the community with its local and traditional knowledge. Key questions at this initial point in time are about knowing the whole community, what are its problems as a whole and facilitating a common vision of how the community would like to be. Once analysis has been made of the local situation, it needs to be presented to the community, building consensus and group identity. It is important to have cohesion before opening to a multi-stakeholder deliberation. The objective of the step is to produce new perspectives of community participants regarding how the community functions and how to address its problems. With a new perspective, the community supported by the external expertise of district officials, politicians, and experts will identify strength and leverage points available and low input, high impact “low-hanging fruits” entry points, or simply “low-hanging fruits” that can quickly provide success and solidify the community’s desire to attempt more change.

Plan Change

Slowly, the community is confident to produce a Community Resilience Plan and in this way design their own pathway to the future. The Community Resilience Plan lists efforts to eliminate problems and threats to the community, including that of livelihood challenges, to its poorer members. The first determination in any planning process should include addressing the most immediate and important community needs, while also looking at those types of things that could be done that would be the most likely to result in benefits and resources that would support the ongoing development processes. The plan offers the means to inform local and district development plans about local community priorities.

Act Jointly

Crucial to adaptive policies for resilience is not to restrict the community’s ability to act. Initial implementation of the Community Resilience Plan should be possible even without external support of district bodies. Changes in community and individual behaviour, new community norms, deliberation structures, and improved basic infrastructure should be possible with local resources. If district authorities are responsive, greater achievements are possible. The community becomes a demonstration site which can even be seen as a policy pilot.

Then the communities are ready to influence the district-level and enable a scale up stage.

Disseminate Good Practice

Drawing lessons learned from the communities, the “best” or rather good practice solutions of different categories can be highlighted at a district-level. These good examples can be disseminated and community-level practitioners can exchange experience with each other. The point is to avoid linear scale-up replication without local adaptation. The process of pilot design needs to be evolutionary, taking what seems to work for the local problems to be addressed. It is positive to pilot a diversity of solutions showcasing different responses to variations of local conditions.

Involve Society

Building on the base of the district-wide experience of communities, multi-sector and multi-level stakeholders need to be involved in discussions about barriers and incentives to transition toward resilience. There needs to be an emphasis about the role of seamless multi-level governance to coordinate efforts and reform policies and structures that may prevent needed change. National networking of communities-oriented

resource persons should be mobilised, even connecting with global links. The district can build so-called “communities of practice” creating identity among resilient communities. District and national actors thereafter can function as multipliers. The result of such overarching coordination is a Regional Action Plan for Resilience Communities.

Inform Policy

The Regional Action Plan for Resilience Communities can function as an instrument for inputting ideas for policy adjustment. These inputs need to find an adaptive governance environment at the national-level receptive to the district-level experience.

At the national-level, policy-makers need to formulate resilience-stimulating policies and programmes.

Introduce Resilience Thinking

Based on input from the experience of demonstration and policy pilot communities and districts, a new form of adaptive policies to encourage resilience communities can be formulated. This requires multi-stakeholder deliberations, so an incentive for one sector does not damage sustainable behaviour in another sector. Agricultural pricing, transport and energy subsidies, health care and education accessibility can have both positive and negative impact on community resilience efforts.

Coordinate Across Sectors

Policy-makers from all line ministries need to coordinate their adaptive policies so as to reinforce and not to contradict each other. Existing local, regional, and national environmental action plans (leap, reap, neap) as well as National Sustainable Development Plans in light of Rio+20 include Climate Change Adaptation/Mitigation Plans need to be coordinated with resilient community thinking. This articulation is best supported by inter-ministerial National Strategy for Resilient Communities which combines international environmental commitments with social responsibility and cohesion. Such a cross-cutting national strategy needs to have the equal status as line ministry strategies and influence budgetary distributions. This integrated, multi-sectoral approach to planning and implementation will provide multiple benefits that may not even be evident at first. For example, sanitation and waste system management can provide valuable resources to build soil quality and provide cooking fuel, while cleaning up the water and preventing diseases. When coupled with permaculture practices and the development and use of biochar, such things as soil productivity, water retention, ecosystem health, and income opportunities can all be increased dramatically.

Review Impact

Adaptive policies explicitly linked to and in support of the national strategy need regular integrated policy reviews. While some policies should contain automatic adjustment mechanisms to quickly adapt governance for changing situations, all policies supporting the national strategy need planned regular review exercises to keep the policy effective. These reviews should be connected to input to the annual budgetary cycle so as to be able to combine policy and budgetary instruments to encourage resilience.

Conclusions

This paper suggests that the best national response to the global challenges to stable provision of wellbeing lies in encouraging bottom-up community involvement which builds local social capital to better respond to unforeseen change. By operating diverse policy experiments at the local level which are closely followed up

and adjusted, learning from the best practice can be spread quickly to other regions where applicable. Local community empowerment combined with flexible policy-making from the central level is the key to multi-level adaptive governance that can deliver the resilience needed for an uncertain future.

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