

# **Sustainable Development and Risk Reduction in the Lower Lempa Valley, El Salvador: Experiences with Local Participation.**

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## **Introduction:**

The lower Lempa River valley covers an area of some 850 square kilometers and is located between the Salvadoran Pacific coastline and the littoral highway that links San Salvador, the country's capital, with the country's eastern territories and Honduras. This predominantly low lying flood plain zone comprises the lower section of a multi national river basin. The middle and upper reaches of the river can be found in neighbouring Honduras and Guatemala as well as in El Salvador. Extensive deforestation has been prevalent in the upper and middle basin areas. Three major hydroelectric facilities are located in the middle basin, providing an important part of El Salvador's electric supply.

The Lower Lempa Valley is at present populated by around 35000 persons, many of whom are extremely poor. Many of these occupied the zone after 1992 with the signing of the peace agreement between government and FMLN guerilla forces. Part of the peace agreement called for the allocation of land in the Lower Lempa Valley to members of opposing government and guerrilla armed forces. New settlements were built in the area alongside previously established settlements, and many of these were located in areas prone to flooding. A significant part of the immigrant population came from highland and even urban areas and had little previous experience of life in lowland, tropical flood plain zones.

Since 1992 the area has suffered various major flooding incidents and, more recently, impacts from the 2001 earthquakes in El Salvador. The flooding associated with Hurricane Mitch in 1998 was particularly dramatic when the opening of the 15<sup>th</sup> of September dam sluice gates increased normal expected flood levels and impacts. Flood impacts have been severe in the zone since 1992 mainly because of the high levels of vulnerability and low levels of resilience of the population, the lack of adequate physical protection infrastructure and changing flooding patterns due to environmental change and the impact of the hydroelectric dam structures.

Here it is interesting to note that disastrous flooding is a recent phenomenon in the zone. Between 1950 and 1980 when the area was occupied by large scale commercial agricultural holdings, few disastrous flooding incidents were reported. This can be explained by the lower densities of population, the more adequate location of infrastructure, the greater resilience of the population and the more adequate dyke and drainage systems in place. During the 1980s the area was virtually abandoned given it was a natural route for arms shipments to the guerilla forces and was subject to constant confrontations between these forces and the army.

Since reoccupation of the area from 1992 onwards, the zone has been characterized by high levels of community and local organization. This is particularly true as regards ex FMLN forces and supporters. War tried population brought organizational experience with them.

Two major organizations emerged during this period, CORDES, on the right bank, and the Coordinating Organization for Communities of the Lower Lempa Valley-la Cordinadora- on the left bank. These developed very different visions of development in the area and were constantly opposed on many issues, despite their common affiliations with the FMLN. Little cooperation or contact existed between the two in 2000. In addition to these two dominant organizations many other smaller area or community based groups emerged that established differing levels of cooperation with the two major organizations. The fractioned organizational structure very much reflected internal fractioning within the FMLN itself, now a political party.

Parallel to the development of the two major and many smaller organizations, the zone received relatively large scale development support from numerous international and national NGOs and government institutions. This is particularly true during the post Mitch period. A general lack of coherence, dispersion and overall competition marked this type of support. Different NGOs established agreements and cooperation with different communities and community based organizations leading to a pot pourrie of different interventions, many of which were technically, socially or environmentally flawed. Essentially, the river marked a frontier with little cross river cooperation. The river divided and did not unite the area.

It is in this context that the author had the opportunity, between 2000 and 2001, to coordinate a project in the Lower Lempa Valley related to risk

reduction and sustainable development, financed by the Inter American Development Bank-IADB- and run through the country's Ministry of Environment and Natural Resources. A fundamental consideration in the conceptual and methodological framework of this project was that of local organization and community "participation". The present document reflects on the rationale and role of participation in project implementation in the highly complex social and organizational milieu of the Lower Lempa Valley.

### **The Project.**

The principle objective of the IADB-Ministry project was to design a strategy for sustainable development in the zone, informed by flood and other hazard risk reduction considerations and goals. This strategy would be accompanied by the postulation of projects that could be the object of future IADB financing. The project consisted of two major activities. Firstly, an integral participatory diagnosis of the zone was undertaken. Secondly, an intervention strategy and project dossier was postulated. Following completion of these activities a second stage of the project commenced in 2001, taking into account one of the principle recommendations formulated in the strategy document. This related to the need for the creation and strengthening of local coordination and decision making mechanisms and advanced training in local risk reduction management.

### **Project Concept. Sustainable Development and Risk Reduction.**

The project took the idea of global risk and global human security as a conceptual starting point. Global risk was seen to incorporate what can be called every day life style and specific disaster risk. The first refers to the recurrent and persistent risk factors that affect the population, including unemployment, ill health, malnutrition, drug addiction, social and family violence etc. These are essentially indicators of underdevelopment and of human insecurity. Disaster risk referred to the particular conditions that guarantee that loss will occur during extreme or not so extreme physical events. The link between the two can be found in the idea that for the poor every day risk both conditions and facilitates disaster risk. Only by reducing the former will we really get anywhere in permanently reducing disaster risk. Development that guarantees increased incomes and resilience is in itself a risk reduction strategy and tool. Disaster prevention and mitigation tools that reduce risk without contributing to the transformation of existing social and economic structures and conditions is basically conservative and only perpetuates inadequate living and production

conditions. In this sense, the project conceptualized risk management as a component of development planning and not necessarily as an adjunct to existing practices.

Therefore, the project did not take a restricted view of risk reduction or disaster prevention and mitigation seeing this as a corrective tool that merely attempts to increase the security of existing infrastructure, production, life styles etc. Rather, it took a broader view whereby risk management is seen as a prospective tool integrated into development objectives and where transformation in production, infrastructure and social capital are needed to contribute to risk reduction in the short and medium terms. Basically, the project was conceived to stimulate broad transitions in development parameters in the zone and thus reduce overall, global risk, of which disaster risk is only one part. Let us be more specific as regards this latter point.

Risk management can be seen to have two major temporal bents. The first is when it is used as an activity that attempts to reduce **existing** risk and assure higher levels of security in a given, static context. In general it takes the existing social and production model and attempts to make it more secure from disaster loss. That is to say, no attempt is made to substantially transform structures, introducing higher levels of every day resilience and security. The second temporal dimension is far more comprehensive and innovative. Here, risk management is seen as a prospective tool whereby new development is considered in the light of its contribution to reducing daily risk and, at the same time, disaster risk. Most schemes are still corrective of past errors and search to increase security in existing settlement and production frameworks, thus doing little to promote development in any ample sense of the word. This is, in the end, self defeating given that only with increased resilience and fortitude may population groups hope to advance on the road to development and increased living standards. In the Lower Lempa project the principle objective was the proposal of a strategy to increase life style resilience, and risk management was seen to be a support mechanism for this, but not an end in itself.

### **Participation.**

Participation has many different connotations. How was participation construed as a notion in the Lower Lempa project?

A dictionary definition suggests the idea of **taking part** in something or **sharing** in the achievement of certain goals. This is only part of the

question. We would prefer to see participation as referring to **being part** of as opposed to taking part in something - Wilches Chaux, 1998. Here, we refer to a state that guarantees that local actors, communities, organizations etc. are active subjects of the process of intervention, and not mere objects utilized to achieve goals decided by others. Here it is useful to consider the verb declination that goes in the following way- I participate, you participate, we participate and they decide! Real participation signifies that local actors are part and parcel of analytical, strategy formulation and decision making processes. Basically, participation signifies an appropriation of the process by local stake holders and a working together with actors linked to external financing or executive agencies.

Real participation signifies democracy and a respect for ideas and opinions, knowledge and desires that do not necessarily coincide with so called scientific and informed technical opinion. It requires a dialogue between differing knowledge and experience systems, not with the idea that local knowledge is always necessarily correct but rather that all knowledge and needs are equally respectable in the first instance and subject, if appropriate, to change and modification in the process.

The advantages of real participation far outweigh the apparent difficulties it may have. However, the strictures and time limits placed on many projects by financing agencies or external actors, many times works against participation. Product oriented schemes and the need to have a tangible product in as short a time as possible, many times lead to failure due to the inadequate consideration of local culture, economics, society and history. The failure to consider and interpret local readings of reality in a rush to implement preconceived schemes based on external technical knowledge many times leads to failure and inadaptability to local realities. The Lower Lempa Valley has had wide experience with this type of intervention.

Participation means respect for alternative ideas, respect for the imagination and knowledge of local actors, a dialogue of knowledge and ignorance, respect for local priorities and concerns, time frameworks and opportunities. It increases opportunities for organizational development and the development of local social capital, with the benefits this brings in the medium and long terms. Overall, it can be seen as a potent way of reducing fundamental social vulnerabilities, potentiating local capabilities and strengths, and in reducing passivity and victimization. It is a sign of respect and as such is respected, providing singular opportunities for growth and achievement amongst local actors

Participation does not mean, however, the dictatorship of local actors. Rather it signifies a complex process by which consultation, discussion, educational and training processes are carefully constructed giving rise to an increased awareness and knowledge of alternative contexts, opportunities, visions and options that provide a milieu for more ample and informed decision as to the road to take and the best strategic options to implement. Moreover, it increases the options for sustainability and continuity fuelled by local actors, once external actors have disappeared from the scene. The promotion of participation many times requires moving from consciousness to action in an interactive process that includes external actors or facilitators and the local population and its leaders. The essence of the process consists in the acceptance that scientific and technical expertise and notions, along with local knowledge and expertise offer a background for discussion and an exchange of views whereby, step by step, consensus and commitment is achieved.

Within the context of the Lower Lempa Valley project, participation was the key stone of the intervention process and, we believe, the keystone of its success. The complexity of the social and political situation in the Valley with competing and antagonistic organizations and views as regards development and risk reduction processes belied any attempt to impose preconceived solutions, as was the idea amongst certain government circles when first considering the project. Dykes, the dragging of rivers and relocation of communities was about as far as preconceived notions went.

### ***Basic Premise as Regards Participation in the Project***

Although participation was established as a basic premise for the project, the particular nature and needs to be satisfied with this were not totally clear at the beginning. Due to this the first stage of the project contemplated a preliminary diagnosis of the zone. Apart from identifying major social, economic, life style, infrastructural and other problems this preliminary diagnosis sought to identify the spaces where participation was particularly important in order to overcome existing barriers and provide an adequate social and organizational milieu for development in the zone

In addition to allowing a first contact with relevant social actors in the area, this preliminary diagnosis of the zone showed the existence of competing interests and organizational structures with their own external support mechanisms. These organizations managed very different notions and ideas as regards change and improvement, both in development terms and as regards risk reduction. The nature of these ideas and groups signified that

what is a single ecological and production area was divided on partisan bases with little collaboration and consensus.

The lack of cohesion signified a probable reduction of development potential and in the capacity to negotiate adequate solutions with external support actors. Given this context, participation was seen to be the only viable option for breaking down or coming to grips with preconceived ideas and notions and bringing groups together in a consensual and cooperative fashion whilst at the same time attempting to respect their differences. Moreover, cooperation, mutual respect and a common strategic framework were seen as strategies to increase the negotiating power of local organizations when faced with the notions and strategies introduced by external actors, whether these were from government or NGOs. Here it is important to state that we are fully aware of the fact that our consultancy group was another external actor, with its own ideas and notions as regards development in the zone and risk reduction!!

On the basis of the preliminary diagnosis, five major challenges as regards participation were identified-these are obviously not discrete categories.

- The need to arrive at certain levels of consensus amongst different interest groups as regards the basic development problematic and the basis for social and economic transformation in the zone, in lieu of increasing the resilience and thriving capacity of the population.
- The need to broaden existing notions as regards risk and risk reduction and the mechanisms available for achieving this.
- The need to design a common strategic framework for intervention in the zone that could be used in negotiation with future external actors, provide support in deciding which projects were to be promoted and provide the basis for the consolidation of interorganisational arrangements and common planning procedures and mechanisms.
- The creation or strengthening of organized social capital and the means for sustained participation in decision making and project implementation processes.
- Appropriation of the development and risk reduction process by local actors.

The major part of our paper will take up on these themes offering a discussion of the mechanisms utilized and the achievements as regards popular participation in the development of project activities and goals. This can be most conveniently considered by dealing with the two major

stages or components of the project: the diagnostic stage and the strategy formulation and project identification stage.

### **Integral Participatory Diagnosis of the Zone.**

The diagnostic phase of the project provided for the achievement of a series of related objectives. First, an analysis of existing social, economic, productive, environmental, legal and financial conditions in the zone was undertaken. This was achieved combining technical studies with permanent processes of consultation and discussion with local organized actors. The latter included interviews, focal point discussions and work shops on local risk management and development planning. Secondly, the development of a full understanding of the organizational makeup in the area, and of existing alliances and antagonisms, limitations and opportunities.

The participation of local actors sought not only to provide a means for introducing their criteria, images, knowledge and experience into the diagnosis process, but also to provide a means whereby comparison and confrontation of competing ideas and notions as regards development and risk could be ventilated. One particular challenge related to the divergent ways in which different groups envisaged a development strategy for the zone and as regards the role and structure of risk management in the achievement of greater levels of security. The art of the participatory diagnosis consisted in the sharing of ideas and notions, debate, conclusion and synthesis.

The following conceptions and problems were identified as of particular importance

- The existence of different production models promoted by the two principle organizations in the zone. One, promoted by CORDES on the right bank, consisted of the introduction of new products using ecologically based fertilizers and irrigation along with the semi industrialization of products accompanied by the opening up of commercial export markets. The basic notion behind this type of model was the search for increased thriving of the population and the generation of spin off effects in the zone. The model was based on organized corporative types of endeavor. On the other hand, the Coordinadora on the left bank favoured coping strategies based on the development of family plots growing a multiplicity of products for home consumption and producing small surpluses for commerce. The two differing models reflect the different political and



ideological positions of organizational leaders. The CORDES model was severely criticized by both the Coordinadora and certain other organizations due to the corporative model followed and the limited participation of the population.

- Differences in the way risk reduction was conceived and the principle instruments for achieving this. These ranged from an absolute faith in flood retention structures, through preference for early warning systems and improved emergency plans. Basically the options did not go beyond these aspects and risk reduction was seen essentially as an adjunct to existing development proposals but not as a progressive activity indicating modifications in terms of the patterns of social and economic development promoted in the zone.
- The subsidiary nature of the relations between numerous communities and organizations and external actors. The low level of negotiating capacity of the population with external actors and the imposition of externally conceived solutions had led to inadequate infrastructure development, inadequate planning and territorial integration, and a general lack of conformity with the role of these actors. When referring to hazards in the zone it was not uncommon to hear that the NGOs were in fact the major hazard!

By means of a process of continuous consultation, focal group workshops and a series of workshops for local organizations on risk management and integration with development planning, major achievements were gained in terms of arriving at common and consensual conclusions and agreements between different groups and actors. This was achieved in a process typified by openness and mutual learning between external and local agents. In particular the diagnosis process and the instruments used to implement this led to the following major results.

- A broad consensus between participating local organizations that development was best served in the zone where this could be promoted following a commonly agreed upon strategy that respected differing approaches but that also sought for complementarity and harmony in the actions promoted. At the same time acknowledgement was given to the fact that there was room for differing approaches to rural and agricultural development and that these could in fact be mutually reinforcing.
- Broad acceptance that a common strategy framework would strengthen local organizations in their dealings and negotiations with external agents permitting a firm approach to saying yes or no to external offers and providing a basis for negotiating the use of technologies in tune with local realities and environment.

- A far broader understanding and acceptance of risk management as a tool for development planning and of the need to look at this in multi-hazard terms and not only with regard to flooding. At the same time, a far greater understanding of the notion of risk management and the range of options open for dealing with flood and other environmental risks was achieved. The restricted notions associated with building dykes, dragging rivers and early warning systems were widened with an understanding and acceptance of the role of land use planning, environmental management and strengthening of natural defenses, changed production patterns and the use of irrigation to change cropping patterns and the dates of the harvesting season, amongst others. Finally, the link between every day risk-development problems- and disaster risk was established and consciousness raised as regards the role of increased resilience and adaptation in reducing global risk.
- An acceptance of the need for coordination and consensus between the major organizations and the strengthening of social capital in the zone as a mechanism to promote further participation in decision making and future project implementation.

Beyond these achievements, which established the basis for the development of the strategic framework and project development stage, important considerations were diagnosed as regards opportunities and needs in the area. Finally, participation led to the forging of confidence between the major organizations and the consultancy group and between these and government and IADB staff. This allowed the consolidation of progress following the diagnostic stage. In this sense the diagnosis went beyond the traditional notion of problem identification and was cognizant of the need to provide a milieu for interaction and for the building up of confidence between the actors involved. The diagnosis was in fact a first instrument of cohesion and participation.

### **Strategy Formulation and the Proposal of Projects.**

Following the diagnosis stage, the project moved on to consider the design of an intervention strategy, dimensioned with priority project proposals for future IADB financing and geared up to the promotion of sustainable and secure development in the zone. Many of the guidelines for the design of this strategy had been delineated in the diagnosis as a result of the participation of the local organizations in the identification and prioritization of key development and risk reduction aspects. Amongst these the following were of particular importance:

- The need to consider the zone, both sides of the river, as a single integrated ecological and production zone, with heterogeneous but complimentary functions and potentials.
- The need to promote projects that sought the spatial integration of the zone and others that took up on key deficits and particular needs in the different sub-zones identified in the diagnosis.
- The emphasis that should be placed on ecological and land use management as a tool for promoting sustainable productive activities and flood risk reduction.
- The need to place the notion of global risk and global security in the centre of the formula. There was a common acceptance of the notion that the reduction of every day risk was in fact a mechanism for disaster risk reduction. Increases in the resilience and security levels of the population would enhance their capacities to face up to flooding when this occurred. A corollary of this was the notion that disaster risk reduction was best attained implementing a diverse series of activities that combined more formally considered development activities and more traditional risk reduction activities. But, overall, there was a common acceptance that increases in rural productivity or services was as much a risk reduction strategy as the building of dykes or the dragging of rivers. The notion of a prevention culture ceded in favour of the promotion of a flood plain culture and recognition that adaptation to flooding could take place if adequate land use, settlement and production patterns were in place.
- The importance of coordination and consensus between different organizations, the need for the creation of a local development committee with local organization and governmental participation, and the need for an increase in the capacities of local organizations for elaborating and participating in the implementation of local development projects.

The final strategy document, developed through a continuous consultation process with local organizations took up on the guidelines outlined above.

The particular projects suggested for IADB financing included:

- Extensions and improvements to the rural road network, particularly the east-west branches, running at right angles to the river and their access to the main roads running north to south. This would provide greater scope for the moving of products and persons and also facilitate evacuation during flooding periods.
- Improvements to, and extension of the rural potable water supply.

- Improved warehouse facilities and innovative commercial schemes in order to avoid the need to use intermediaries.
- Protection, consolidation and extension of the Nancunchiname forest on the left bank of the river such that it provide a natural buffer to flooding and also open up new productive and income generating activities such as flowers, butterflies, medicinal plants and ecotourism.
- Service improvements in rural centres and the selective relocation of flood prone settlements.
- Capacities for maintenance of dykes, improvements in early warning systems and training in disaster preparedness.
- Consolidation of the incipient local development coordinating committee formed during the projects first stage, and the promotion of training courses on risk management and project promotion and control.

As can be appreciated, these projects cut across the development-risk reduction problematic offering a combination of global risk reduction options where the primary objective is the stimulation of improved conditions of life, resilience and production. The project portfolio was constructed jointly with the local organizations taking fully into consideration their perceived needs and priorities.

### **Post Project Considerations**

The project terminated its first stage with the presentation and acceptance on the part of the local organizations, the central government and the IADB of the strategic framework, and the projects postulated for IADB consideration.

The strategy document was reproduced in abbreviated form for distribution and ample discussion in the Lower Lempa zone. This was formally requested by the local organizations. IADB officials expressed there satisfaction with the process indicating that it was highly encouraging to see how the local organizations and population had appropriated the strategy document and the project goals. Government ministries agreed to use the document in taking decisions on future investments and activities in the area, whilst the incipient local development coordinating committee was committed to using the document as a guideline for future activities and negotiations with external agents.

The perceived success of this first stage project was instrumental in the allocation of a further half million dollars by the IADB from British and Japanese funds for the promotion of priority promotional activities identified in the strategy document.

Over the last 10 months, British CABILICA funds have been employed in creating, strengthening and widening participation in the newly created local development coordinating committee. This Committee plays an active part in decisions on project development. Moreover, funds have been dedicated to training programmes to increase local capacities in risk and project management. These activities are a clear indication of the full acceptance of participatory principles on the part of government and the IADB, not to say the commitment of previously antagonistic local organizations to collaborate and arrive at adequate consensus as to the future direction of developments in the zone.

Japanese funds have been dedicated to financing the elaboration of feasibility studies for the projects identified in the strategy document. Adequate termination of this process will lead to the allocation up around 10 million dollars by the IADB for project development, where local organizational participation will be a crucial component of the projects.

### **The Local Development Coordinating Committee.**

The local development committee constitutes one of three structures created in the zone as a result of the project. This Committee is made up of representatives from 6 local organizations, two municipalities and central government. Membership has increased from the original two local organizations, gradually incorporating new members where these satisfy established technical and social criteria. A second tier organization now exists, made up of an Open Consultation Forum where other local interests and groups are represented. This serves as a place for debate and decision on development initiatives in the zone. These two instances are supported by a technical committee that gives advice on proposed initiatives.

This structure has taken time and careful discussion to put together given the antagonisms and susceptibilities existing in the zone. The existence of these structures provides a legitimate mechanism for ample popular participation and an increasing local appropriation of the development process. The existence of the Committee has however created certain susceptibilities amongst other non participating organizations that have attempted to boycott the initiative for diverse reasons. In such a highly political milieu some have even suggested that the Committee is a type of

external manipulation of processes in the zone and a mechanism for the achievement of government objectives, including a feared expulsion of population from the area and the reoccupation of its rich lands by large scale enterprise. Moreover, the ample process of participation that the structures permit will clearly slow down decision making and project implementation. However the benefits are seen to far outweigh the disadvantages with major development benefits for the zone.

### **Concluding Observations.**

The Lower Lempa Project was conceptually and methodologically based on the notion of full local participation. This was not only necessary from a procedural perspective in the search for legitimate results and appropriation of the development process in the zone but also because of the existing highly fractioned nature of the organizational base in the region, and the objectives pursued.

The initial diagnosis was used not only as a means of dimensioning problems, opportunities and needs, but also as a dynamic process that allowed the confrontation, discussion and resolution of different images of development and risk reduction in the zone, and as a means of creating an adequate milieu for further participation and collaboration. The final widely accepted approval of the strategic framework and of the projects identified, demonstrated the success of the approach.

The formation of the local development coordinating committee and the other discussion and support structures was the direct result of this process and moves the zone towards a more integrated and collaborative approach to development decision making and project implementation. The risks associated with this process are well known and the play off between participation and bureaucracy are clear.

However, the overall advantages may be seen to far outweigh the disadvantages and guarantee that decisions on new investments are more carefully taken in accord with needs and opportunities in the area. The autonomous decision to promote full participation implicit in the development of the first stage of the project has now been consolidated with the creation of these local structures which validate and support the permanent promotion and use of participation. Not all will be in agreement with the developed scheme but the trend is in favour of more and more collaboration as opposed to the fractioned opposition of certain groups that still feel themselves to be excluded or who see the scheme as another attempt at external control of the zone. Politics die hard and the fractioning

of political parties is difficult to deal with, but the evidence gleaned from the scheme shows that even highly antagonistic forces can come together where there is a will to put human welfare above partisan needs and struggles.

The formation of the discussion and decision structures in the zone helps to confirm the notion that vulnerability and risk may most adequately be reduced where the creation or strengthening of social capital provides a mechanism for discussion and participation and appropriation of the development initiative and process.

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