Rio+20 Case Study – Public Organisation - CAMP Kuhiston (www.camp.tj)

'The stabilisation of hazardous slopes through planting fruit trees'
Hakimi Jamoat, Nurobod District, Regional Subordination of Tajikistan

This project based intervention was over a period of two years in the Nurobod district of Tajikistan. The project provided a structured integrated approach that linked disaster risk management in vulnerable mountain communities, and the planting of appropriate fruit tree species to mitigate the risk and improve the productivity of the land.

Objective:

The integrated approach was meant to address holistically the socio-economics and environmental aspects of disaster risk management by providing support to local communities:

Challenges/Opportunities:

Nurobod district is located around the Vasht River, one of the main water arteries in the country. The major tributaries flowing from the high mountain areas have cut deep gorges into the soft loess soils, and during the spring snow melt there is a tangible risk of floods, landslides, avalanches and mudflows that threaten the livelihoods of the mountain communities. In the spring of 2010, the single track road that links the 26 villages in the Hakimi watershed to the main road from Garm to the capital Dushanbe was blocked for 41 days due to a mudslide.

Over the last twenty years this Islamic region has adopted a more conservative form of Islam. This adherence to strict religious rigueur has resulted in a submissive role for women within the community, who now have to undertake a more traditional closed role within the household.

The people of Nurobod have become isolated and vulnerable through political instability, harsh winter conditions and the exodus of the working population to Russia for work.

Stakeholders involvement:

Camp Kuhiston managed the project intervention. The local government provided their backing by signing a memorandum of understanding, and helped clarify any land ownership issues. The local communities participated in a five day disaster risk management workshop and developed tree planting proposals for their own communities, to specifically stabilise identified hazardous slopes around the village. The Horticulture Institute developed a fruit tree planting plan, conducted a series of fruit cultivation training sessions, and undertook monitoring of the fruit trees. This was complimented by soil sampling of the selected sites by the Tajik Soil Institute. The Vakil (head of the village) initiated a local community day of action known as a 'Hasha' to erect the wire fence, and to plant the saplings.

Budget, funders, timeframe:

The Swiss Agency for Development and Co-operation provided $100,000US financial support for disaster risk management workshops. The project was subsequently supported by NCCR North South, PAMS Central Asia project that granted $44,000US to the tree planting, and the associated activities

Positive Outcomes :

The main outcome of the project was to improve the quality of life and environmental safety. The capacity for over 300 community members was increased on the topic of natural disaster management in 15 communities in the Nurobod region.

A total of 2000 fruit trees (peach, apple, quince, walnut, pear, cherry and apricot) were planted in 7 communities based upon the developed village risk mitigation proposals. There was over a 95% survival rate. The trees will stabilise the soil, improve the soil structure and increase the nutrient the content of the soil. As the trees have grown and become established the risk of natural hazardous such as floods and mudslides has decreased. 100 people received practical training on fruit tree cultivation, and soil and water conservation to supplement the tree planting activities. Several of the participants have since planted their own trees.

The local government structures and the local community are now more fully engaged in supporting future interventions to help secure the livelihoods of the people of the district. The case study was documented in the World Overview of Conservation Approaches and Technologies database (WOCAT)

Negative Impacts :

Local level disagreements between the local government and the village communities were observed initially for the project site land plots. Fear of losing control over local communities and questioning the eligibility of tree planting sites created some complications though the formal agreement was in place.

The newly planted peach trees suffered in the heavy spring rains. Although the peach trees growth was not as rapid as first hoped they continued to survive, and it is expected they will produce fruit several years later.

On one of the tree planting sites, the fence line was breached by livestock. Although this did not result in permanent damage; only the removal of some leaves from the saplings, it clearly highlighted the need for strong, well erected and maintained fencing.

Key factors of success:

The broad range of stakeholders posed organizational set up issues. To achieve these goals formal processes on cooperation were brought in and this helped clarify roles and responsibilities for avoiding confusion and confrontation during the implementation phase.

The key to the success of the project was using a logical structured approach developed through a participatory process based on consensus building and formalization of agreements. The continuous monitoring of the fruit trees by the Horticulture institute representative ensured prolonged community involvement and interest.

Lessons learned:

The engagement of the district government as early as possible is essential. Although attempts were made to promote their interests in the activities, there was limited involvement until the practical part of the intervention was ongoing. With the initiation of a roundtable event which brought together the stakeholders, including district and local government representatives, future activities were more firmly supported and the implementation process improved.

The engagement of women was a significant issue, despite using female teachers for the participatory courses. Women were restricted from participation by men. It was decided in agreement with the head of the village, that the women would attend a separate workshop to create a safe working environment for them to express their views and opinions. However, the women still remained relatively quiet, and it became apparent there were high levels of illiteracy in the younger women.

Future actions:

Over-exploitation of natural resources is one of the unsustainable activities leading to increased risk to natural disasters. 11.8t of Natural resources and $350 per household was the average fuel consumption in the Nuroboad Village of Shahtuti Bolo (n=59).

To supplement the planting of the fruit trees, a campaign of energy efficiency measures is under way using at simple adaptation of the outdoor cooking stove, energy efficient two room stoves and solar powered lights. This project funded, by the Jephcott Charitable Trust in the UK is supplemented by funding from the Mountain Partnership to improve the energy security, of the local hospital through the installation of thermal insulation and solar water heaters.

Links:

www.camp.tj

http://www.ipcinfo.org/country_tajikistan.php

www.sdc.admin.ch

www.north-south.unibe.ch/content.php/page/id/309

www.jephcottcharitabletrust.org.uk

www.wocat.net

http://cdewocat.unibe.ch/wocatQA/SummaryApproach.php?selected_id=294

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www.mountainpartnership.org