Post-Disaster Action Planning

By Greg Andrews, Aman Mehta, Pieter Smidt, and Erik van der Zee

- **Rapid development of a series of pragmatic subdistrict action plans embedded in spatial frameworks was needed to prioritize and direct post-disaster rehabilitation and reconstruction efforts after the 2004 tsunami and 2005 earthquake on the island of Nias, Indonesia.**
- **Speedy and accurate data collection and analysis by small teams in consultation with communities and local governments, and simple presentations of results led to a high level of demand for and uptake of the plans.**
- **The plans provided a template for effective post-disaster responses and continue to be used by local governments for their development and budget planning.**

Introduction

The enormous damage caused by the 2004 tsunami and the 2005 earthquake required rapid planning leading into practical and user-friendly action plans for reconstruction. The Earthquake and Tsunami Emergency Support Project provided financial resources and technical assistance to undertake such rapid planning for a significant part of Nias Island.

Challenges

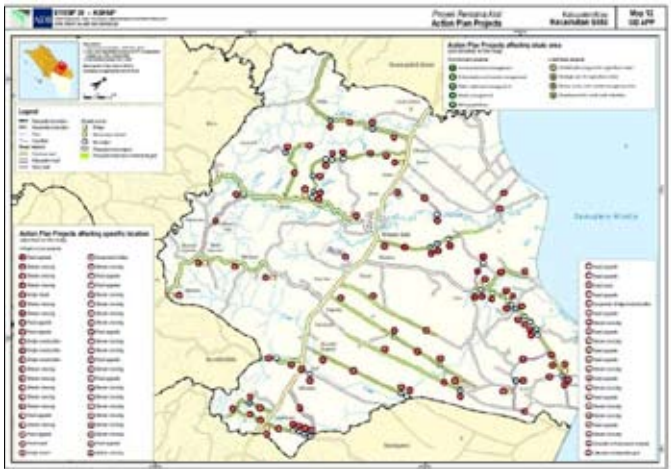
Rapid assessments and detailed planning documents needed to be delivered in a format that would lead to practical action plans while meeting the technical requirements of the Indonesian Agency for Rehabilitation and Reconstruction of Aceh and Nias (BRR).

On the one hand, the BRR required strategic level planning to determine the best possible use of resources for various reconstruction interventions.

On the other hand, the local government and communities required a simple and pragmatic document listing priority programs related to infrastructure, livelihood, and environment that fit their budgeting and program cycles. The solution was a strategic overview at *kabupaten* (district) level as an umbrella for a prioritized list of projects for local use at *kecamatan* (subdistrict) level. Maps provided an invaluable overview for both the strategic and local-level action planning.

Approach

Training and deployment of small well-equipped field teams was a key to success. Modern technology in the form of Global Positioning System and field mapping software were utilized. Methodologies were kept simple to assure quick uptake and accuracy.



Example of a map produced for proposed projects for Kecaman Gido

Many field team members had never used the equipment or methodologies before, but quickly became comfortable and proficient in its use. This transformed into rapid document production and confidence in the reliability of the data. It shows that rapid assessments do not necessarily need to compromise the quality of the data if methodologies are clear, well-defined, and easily understood.

Understanding community aspirations and needs was another key for success. The teams' ability to engage the community while in the field was critical in the overall uptake of the action plans. Although the field work was undertaken only over 2 weeks, the dialogues during this short period and the use of local knowledge and guides provided information for the plans, as well as a clear understanding and enthusiasm for the activities by the local community.

Much of this stemmed from **good preparation before entering the field.** Maps, satellite imagery, and an initial presentation provided an immediate focus for dialogue and trust building around the process.

Feedback at the end of the field work through public meetings to verify data and to prioritize proposed projects provided further trust in the process.

Key Findings

In total some 32 *kecamatan* (subdistrict) spatial framework and action plan documents were completed. These documents were up to 200 A3 pages in length, with more than 13 maps in each document, along with video disks containing the documents and interactive maps. Each document required 2 weeks of field and 2 weeks of office work.

One thousand, seventy-eight action plan projects have been identified with an approximate value of $156 million.

The ability to deliver such an enormous amount of work for planning in such a short period was due to the robust system developed to collect, store, assimilate, analyze, and report large amounts of data and information in a clear and systematic way.

The methodology could be used by local agencies, albeit with some adaptations and user training. It could also be used for project identification as input for the annual budget of local governments in non-disaster areas.

Although the production of such a significant amount of work is admirable, this work is of little value unless it is actually used. The level of demand and use of the documents validated the effort that went into their production. The plans were quickly utilized by the BRR as the basis for their reconstruction activities, and were recognized by the local government as an invaluable tool for their yearly planning and budgeting cycle, which was without doubt the most rewarding aspect of this project. They found that the action plans provided local government agencies and communities with

- a pragmatic list of prioritized works,
- a better and more accurate spatial understanding of their surrounding environment as a base for analysis and action planning, and
- an enhanced appreciation of the difficulties in delivering responses.

Samse Pandiagan

Field team members taking a Global Positioning System waypoint at a damaged bridge

Agus Samisir

Good community consultation and continuous exchange of information was crucial to the success of the project

Outcomes

- Local government officials have used the plans to develop their yearly budgets for submission to the national government.
- The national electric power supplier has used the plans to identify gaps in its network and planned expansions.
- Nongovernment organizations and United Nations agencies have used the plans as baseline information for developing complementary reconstruction interventions.
- Several projects were taken up by nongovernment organizations, the United Nations, and development partners where it was identified that BRR or local government funding was not adequate.

Conclusion

The action plans developed in Nias under the project have assisted BRR, nongovernment organizations and development partners in the reconstruction of Nias. The plans covering infrastructure, livelihood, and environment continue to be used by the local governments for their development and budget planning.

For further information, contact
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