From emergency relief to livelihood recovery
Lessons learned from post-tsunami experiences in Indonesia and India

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Abstract
Purpose – The purpose of this paper is to investigate the issue of post-disaster livelihood recovery through economic rehabilitation, with the illustration of post-tsunami promotion of microentrepreneurship activities generating employment and income among the affected populations.
Design/methodology/approach – The paper examines two field case studies in Aceh (Indonesia) and Tamil Nadu (India), where a well-established European NGO carried out economic relief and microentrepreneurship rehabilitation in 2005-2007.
Findings – Despite unlimited trust in rapid reconstruction capacity, post-tsunami livelihood recovery has been chaotic and uncoordinated. Contrary to humanitarian agencies in charge of emergency relief, only a few development agencies and NGOs were able to deliver a rapid rehabilitation of microeconomic activities existing locally before the disaster.
Research limitations/implications – There are values but also obvious limits to comparing the micro-level experiences of a major European NGO in two different locations such as Aceh and Tamil Nadu, and to deducing macro- and meso-level lessons to be learned.
Practical implications – There are difficulties in benchmarking the division of labour but necessary coordination among development agencies and their humanitarian counterparts in the field of post-disaster sustainable economic rehabilitation.
Originality/value – Post-disaster economic security and livelihood recovery are at the forefront of current international policy research in humanitarian and development cooperation circles. Documented case studies and lessons to be learned are still scarce for feeding possible best practices.
Keywords Rehabilitation, Microeconomics, Business development
Paper type General review

The Indonesian field research was conducted by two Italian advanced students, Stefania Scuteri and Stefano Miniati, coached by Bruno Neri, Senior Supervising Officer in charge of Asian countries at Terre des Hommes-Italy headquarters in Milan, a major European NGO based in seven European countries including Italy. The field research work was conducted together with Aron Cristellotti, country representative of TdH-Italy in Blang Asan, Pidie district, Nanggroe Aceh Darussalam Province, Indonesia. In India, special thanks go to Dr Loredana Marchetti, Senior Supervising Officer of Terre des Hommes Switzerland/Geneva, to Ranjan Prasad, Coordinator, People’s Action for Development in Vembur, Thuticorin district, Tamil Nadu, who facilitated the field research conducted by the author of this article, and in Indonesia to Aron Cristellotti, country representative of TdH-Italy in Blang Asan, Pidie district, Nanggroe Aceh Darussalam Province.
Introduction: conceptual debate on typology of post-tsunami assistance

Depending on how you look at it, you can say this has been the best-funded emergency in the world—or the most expensive humanitarian response in history (IFRC, 2005).

The high-profile coverage of the tsunami led to the largest response to a disaster in the history of humanitarian aid (Telford and Cosgrave, 2007). But the glare of the medias and public attention pressured donor agencies to spend rapidly and visibly, often neglecting search for pre-disaster local data and ex-post precise needs assessment. The complexity of a major disaster (Gilbert, 1995) and long-term recovery beyond immediate emergency relief has also been underestimated by a number of donors and NGOs. In its report released in July 2006, the Tsunami Evaluation Coalition (TEC) underlines the central importance of addressing the rapid shift in post-disaster management from emergency relief to development and livelihood recovery among the affected populations. Though rather obvious, such a shift has been underestimated within the first months following the tsunami, most humanitarian agencies being inexperienced to meet locally affected people’s long-term development needs.

Further questions have been raised such as:

1. Should the content and quality of humanitarian assistance, short-term by nature, be upgraded to include linkages with longer-term development rehabilitation?

2. Could a well monitored division of labour and coordination be settled among humanitarian agencies and development cooperation institutions, both at the international level and in the country affected by a disaster?

Beyond pure economics of survival, there is no international standard definition of livelihood recovery in a post-disaster context (Albala-Bertrand, 1993; Okuyama, 2003; Rasmussen, 2004). It does not take into account the degree of pre-disaster vulnerability among the affected populations, which may differ significantly between developed and developing countries, and even more within any single country of the second category (Kahn, 2005; Strömberg, 2007). The issue is even more complex when a disaster takes place in a region also affected by a political and security crisis, like in Aceh. Yet, the terminology of livelihood recovery has been utilized in every post-tsunami document published by donors since 2005, up to a point that the International Federation of Red Cross and Red Crescent Societies (IFRC) decided in 2006 to appoint for the first time livelihood aid officers among its senior staff.

The British development agency (DFID) provides a rather comprehensive definition of the concept of “livelihood”:

A livelihood comprises the capabilities, assets (including both material and social resources) and activities required for a means of living. A livelihood is sustainable when it can cope with and recover from stresses and shocks and maintain or enhance its capabilities and assets both now and in the future, while not undermining the natural base.

The concept of livelihood covers a wide range of economic and social contents (DFID, 2005; UNDP, 2005), which have also to be contextualized, with enormous variations among pre- and post-disaster parameters from one situation to another. An emerging international consensus seems to recognize that:
emergency relief does play a crucial role during the first weeks and months following a disaster;

- it can include in a broad sense the delivery of minimum safety, stability and confidence building beyond the material supply of survival equipment and tools; and

- the role of humanitarian agencies should stop there, and be substituted by reconstruction and development aid, supportive services and various types of international grants and domestic incentives to enable the affected populations to get back within shortest possible delays to their ex-ante economic and social activities.

The plea for a rapid and effective shift from emergency relief to development reconstruction has led a number of donors and NGOs to target in the context of the post-tsunami the rehabilitation of small economic activities. Such activities should aim to restore access to local production of basic commodities and petty services, to start again other types of pre-existing economic activities, in order to secure employment, income, and dignity for the majority of survivors (GTCA, 2005; ILO, 2005a; ODI, 2005; UNDP, 2006). The declared objective of self-reliance and sustainability of such microeconomic activities proceeds from the hard fact that continued injection of national and foreign aid is neither desirable per se, nor feasible. Furthermore, a number of well-funded post-tsunami hardware reconstruction projects tend to rely on external contractors, and therefore do not source for materials, components and parts locally.

Logically, given the limits of their relief mandate, the vast majority of donors retreat within a time span of one to two years, because of their own policy and project financing constraints. In the meantime, other crises call them elsewhere. Furthermore, humanitarian agencies do not have a development mandate. Even if they had one, there is no systematic justification per se to transform every place affected by a disaster into a new development cooperation area (World Bank, 2005a).

In the context of this international post-disaster debate, this article intends to address the necessary shift from emergency relief to development reconstruction, in the case of Aceh and Tamil Nadu. More specifically, it reviews the local conditions of recreating, with the support of local institutions and Italian and Swiss NGO partners, microeconomic activities to guarantee the recovery of coastal communities affected by the tsunami.

Location of NGOs’ post-tsunami field intervention

The human toll due to the tsunami has been massive, especially in the provinces of Aceh and North Sumatra. Within hours after Indonesia, the Eastern coasts of India and Sri Lanka suffered the most (McCulloch, 2005).

Following the disaster, the Italian NGO Terre des Hommes selected the Pidie district, as one of the largest located on the Northeast coast of Sumatra. Pidie used to be a rather wealthy district in terms of fishing activities, aquaculture, farming and post-farming, husbandary, fruit production and horticulture. Human and economic destructions by the tsunami were very severe. The Swiss NGO Terre des Hommes-Geneva targeted the Vembar district, located in South Tamil Nadu along the Gulf of Mannar (GOM), between the cities of Rameswaram (facing Jafna, Sri Lanka) and Thuticorin. Compared to the Nagapatinam district further North, Vembar faced mainly material destructions, with much lower human casualties. However, it was
from a socio-economic viewpoint much more vulnerable than the Pidie district due to the hardship conditions of the local environment. Even though the 320 km of the coast are classified as national sea biosphere patrimony, due to its exceptional biodiversity and coral reef fauna, it belongs to the most semi-arid areas of Tamil Nadu, and has to face regular typhoons during the moonson. The salinity of soils, the scarcity of underground water, the low delivery of basic infrastructures explain the deep poverty of the area and its marginalization from major communication and economic flows. In addition to fishing, the only other activities enabling local inhabitants to survive are goat rearing, tapping of fibres and sweet juice from palm trees, charcoal, and production of salt. Formal institutions have largely failed to provide livelihood development to the region, whereas fishing and rural production of surpluses in kind and cash was noticeable in Northern Sumatra before the tsunami. After the initial huge relief effort, rebuilding the productive sector became the most important but difficult challenge. Fishery and also aquaculture (in the Indonesian case) were the most destructed sectors (Anzbalagan and Nirmala, 2005). Most of the local production used to be consumed locally or exported unprocessed to other domestic destinations and overseas (proximity of Aceh vis-à-vis regional markets like Malaysia and Singapore).

Microentrepreneurship landscape and post-tsunami recovery-enabling environment

Liberal theories envisage small entrepreneurship as a rather free and spontaneous phenomenon based on individual or semi-collective/community grouping choice, in which neither the State nor any other external player should intervene. However, other theoreticians have demonstrated the interdependence between the small enterprise and its environment, which has always to be contextualized (Glancey and McQuaid, 2000). Since the 1990s, the Committee of Donor Agencies for Small Enterprise Development, coordinated by the World Bank and the International Finance Corporation, has put forward the concept of business enabling environment, which implies that some natural and/or institutional factors may handicap or prevent the birth and development of entrepreneurial dynamics. Yet, such concepts were developed under normal conditions, and not applied in the context of disasters. Therefore, theories regarding the facilitation of post-disaster business rehabilitation environment are simply lacking (ILO, 2005b). Among humanitarian or development agencies, practical experiences in post-crisis economic recovery have been limited and highly localized, and have not produced well-established conceptual knowledge as yet (World Bank, 2005b).

In both the Indian and Indonesian locations, small entrepreneurship in the proper sense hardly existed beyond the village community production of basic food such as fish, shrimp, rice and fruits or husbandry, which were not even semi-processed and transformed locally, but sold through local traders and transporters, with the value added chain bringing high revenue outside the district. In this context, middlemen using mainly motorbikes or mini-trucks are active at each possible interconnection between demand and supply. Their close proximity to local households allow them to keep their position as intermediaries without any risk of competition from outsiders, as most local producers do not have a direct access both to suppliers and market channels.

Beyond the pre-tsunami existence of household production activities, it has been difficult to identify local community networks with minimum solidarity level enabling post-disaster economic and social relief to be channelled rapidly and effectively. Quite
surprisingly, the high or low presence of local government has not modified this picture, neither in Indonesia nor in India.

In the case of Indonesia, a striking sociological feature was the absence or low level of cooperation among households. The lowest level of extra-family cooperation still is the village community and is mainly channelled through the Islamic religion. The mosque functions as a social catalyst and meeting place to conciliate various public interests. Terre des Hommes-Italy has met very few examples of common risk management and spontaneous solidarity in grassroot rehabilitation efforts. There are a few exceptions in some villages, where the fishing net is collectively managed by all fishermen. Elsewhere it is the property of a few asking other users for a fee. Another example of cooperation is the breeding of public ponds: local breeders work for themselves, but because they make a profitable use of a public asset, a share of their revenue has to be given to the local community. The low level of rural civil society community organization has not been much counterbalanced by high aid commitment of local public administration. Due to thirty years of separatist conflict and the recent autonomy of the Aceh Province, governmental presence is widespread, but not trusted. Its main objective is more to control than to support the local population, even after the tsunami. Its concern to rehabilitate the local economy has been rather nil, leaving the task to the international NGO and UN agencies (BRR and UN, 2005a). Clashes have been frequent with the local administration taking briberies. Anger has also developed as none of the new economic decentralization legislation allocating 70 per cent of Aceh oil and gas revenues to the province have reached the low-end segments of society. In practice, the Agency for Rehabilitation and Reconstruction did not facilitate but controlled foreign aid, and even became a kind of competitor vis-à-vis NGOs to obtain foreign funding (BRR and UN, 2005b).

In the case of India, the level of local solidarity seemed much higher at least on the surface, perhaps due to widespread poverty compared to the Indonesian district of Pidie. For many years, almost every fishing village has had a Fishermen Co-operative Society to implement government welfare programmes and subsidy schemes. However, very limited benefits came through, marketing the fish being left entirely to auctioneers and middlemen. The Department of Fisheries, Government of Tamil Nadu, has played a role in dealing with fishing regulations, conflict resolutions and welfare schemes, but it has failed to understand the erosion of traditional fishing conditions and the impact of the mechanization of the fishing industry (Arockiasamy, 2005). Owing to poor access to financial assistance, most fishermen have remained in debt vis-à-vis traders and moneylenders. The overall minimum presence of public and non-governmental institutions probably explains why the Gulf of Mannar remained out of reach by post-tsunami assistance. Compared to the Gulf of Bengal up to Pondichery and Chennai, where hundreds of national and foreign NGOs have operated in a rather uncoordinated way (Concord/Voice, 2005; Fritz Institute, 2005), almost none contemplated the idea of operating further South in the district of Vembar, which does not have even a single guest house to accommodate development aid staff. Post-tsunami assistance has therefore been extremely scarce apart from moral and social support through Christian church networks, which are predominant in the area compared to the Hindu and Muslim ones. Apart from the NGO People’s Action for Development located in the district city of Vembar, there is little trace of any other NGO. Local government assistance has been close to nil, except a brand new project of
wholly cemented flat roof houses built by a large Northern Indian contractor in the middle of nowhere.

**Sustainable livelihood recovery assistance through microeconomic initiatives**

Given the distinct household and microentrepreneurship landscapes as described above, the livelihood recovery strategies followed by Terre des Hommes-Italy (TdH-I) and by Terre des Hommes-Switzerland/Geneva (TdH-CH) have differed quite substantially. TdH-I has followed a rather classical assistance path, whereas TdH-CH was able to venture together with an Indian NGO, which had been locally active on the development front years before the tsunami. In both cases, foreign NGO cooperation has gone beyond post-disaster economic relief through replacement of infrastructure and equipment. It has also included the delivery of technical and financial means to relaunch those microeconomic activities prevailing before the tsunami, with a long-term objective of sustainable recovery of local livelihood.

Terre des Hommes-Italy (TdH-I) worked first in East Aceh together with the UNDP Cash for Work Programme. Then it implemented several projects of its own (housing, health care, school reconstruction, economic livelihood). More recently, TdH-I has been conducting a livelihood recovery project in the Pidie district together with UNDP, which focuses on the rehabilitation of aquaculture and on some other income generating activities. The concept is not to promote new activities but to rehabilitate prior-tsunami microeconomic ones, with a gender concern. A particular target has centred on fishing equipment and production of nutcrackers. The Jangka Buya sub-district was chosen because of heavy damages. The goal was to involve fishermen in order to rebuild self-reliance as soon as possible. Two village groups were trained in the relaunching of their fishing and post-fishing activities, and were exposed to basic know how in accounting, leasing and sales. The revitalized fishing group in Pasie Aron has been registered as a cooperative in February 2007, providing access to low price fishing equipment and low interest microcredit. Another type of cooperative was successfully tested with a group of women producing nutcrackers. The group has been able to buy additional tools to become fully operational and to involve gradually more members since early 2007.

In the Gulf of Mannar, a local Indian NGO called PAD (People Action for Development) has adopted an integrated and sustainable development approach, addressing the fishing villages’ economic rehabilitation, social development, and environmental needs. Based on a number of small projects conducted for 4-5 years preceding the tsunami, PAD, which is not a humanitarian NGO, had immediate access and was able to assess in each village the reconstruction situation. These reasons led TdH-CH to support PAD’s assistance to fishing, post-fishing and complementary activities through the reinforcement of existing community self-help groups (SHGs) and the creation of new SHGs. New communitarian boats, motors, different types of nets, and hooks have been supplied to encourage fishermen to resume going at sea within shortest delays possible. Quantity, quality and diversity of these inputs have enabled fishermen to access better equipment than prior to the tsunami. Within one year, they have been able to improve their fish catches. Some SHGs have even made a spontaneous decision to buy back the new communitarian boats, initially provided for free, in order to constitute gradually a savings fund, which is used for maintenance and
repair purpose, or for emergencies (accidents or death at sea). Social solidarity in the form of SHGs is among the main factors explaining why post-fishing revenues have substantially increased (+30 to 40 per cent compared to pre-tsunami levels). These SHGs have taken responsibility for maintenance and repair work of fishing equipment, but also for the proper distribution and management of insulated ice boxes and freezers collectively owned. Refrigeration, as an absolute necessity in a tropical climate, has enabled better fish marketing and transportation. With the support of a small microcredit revolving fund financed by TdH-CH and channelled through PAD social workers, the SHGs have started microentrepreneurial initiatives in the following areas:

- post-fishing marketing and transportation to end markets;
- bulk purchase of rice for resale in small quantities;
- production of fish pickles, soap and other small items; and
- goat rearing.

Thanks to the microfinance scheme, some SHGs have been able to cut down and even pay off fishermen’s debt dependency vis-à-vis intermediaries buying and transporting the fish directly from the beach, but also lending money for the acquisition of nets and other equipment. Some SHGs are now able to organize small fish auctions. Out of total sales, 75 per cent of revenues go to fishermen, 5 per cent to SHG-appointed traders, 15 per cent to microcredit repayment, and 5 per cent to a SHG saving account (to be used only in case of emergency, and since 2007 as a collective microinsurance). Access to microfinance has enabled some SHGs not only to get away from abusive intermediaries, but also to recruit some of them as SHG’s regular employees in charge of fish auction, marketing and transport. SHG social dynamics have also resulted in awareness creation, empowerment and embryonic advocacy among local village communities. In addition, PAD has initiated Village Development Committees in charge of channelling relief assistance. Such committees are composed of panchayat representatives, traditional leaders, religious figures, schoolteachers, community and SHG representatives. This has come up to the surprise of South Indian politicians, who have traditionally looked down at this very poor region.

Post-tsunami challenges of new microentrepreneurship creation and development

Theory and practice in entrepreneurship studies show that the creation and sustainable development of new microeconomic and small business activities, even more in vulnerable developing countries, is the result of a complex chemistry of enabling factors, which can be hardly delivered neither from local government alone nor from foreign donor agencies (Harper, 1984; Meredith et al., 1982; Prahalad, 2006). Such chemistry seems even more complicated to forge under unstable or abnormal circumstances, especially after a disaster or any other type of violent crisis, despite the obvious need to recreate employment and income generating activities on the ground as rapidly as possible (ILO, 2005a). It seems feasible to relaunch pre-disaster existing economic activities through capitalization of know-hows among the affected population, whereas ex-nihilo creation of new business may be perceived as out of reach even in a rather entrepreneurial culture like India in recent years. An additional difficulty may also lie in the informality, petty scale and vulnerability of the microeconomic activities concerned, and the difficulty to design technical and financial
supportive tools adapted to such activities, and to find out appropriate modes of
delivery (UNDP, 2004; Prahalad, 2006; Flynn, 2007).

In Aceh, the province has been gradually moving from economic recovery in 2005-2006
to renewed development and growth since 2006-2007. However, because of relative
isolation during the 30 years of armed political conflict preceding the tsunami, and direct
absorption of oil and gas revenues by the Indonesian central government, very few small
business development services have been operating and even less after the disaster. For
instance, a wide range of national and foreign microfinance organizations have opened a
local office, but most of them have performed little in terms of territorial coverage and
effective lending to those in need. The cooperative system has not performed much either
due to its infancy. The most frequent attitude among communities affected by the
tsunami was to wait for the help of some institution. Post-tsunami introduction by
outsiders (such as TdH-I) of self-help groups and cooperative principles were difficult and
time consuming, even though this route has proven to be easier and more practical than
formalizing a small business. It has not been uncommon to witness the creation of
cooperatives only for the sake of accessing funds from donors.

Only Islamic microfinance institutions, making use of religious donations and taxes,
have worked not only on commercial basis but also on social terms, thus developing a
close relationship with local communities (Asian Development Bank and Government of
Japan, 2005; Imam Budi Utama, 2006). However, microcredit has not been the appropriate
answer to many business development needs. For example, post-tsunami transportation
facilities were a major concern. Most fishermen were used to sell their products directly
from the boats, the beaches or in the immediate vicinity without direct access to markets.
After the disaster, truck and other transportation hiring prices have considerably
increased, and a foreign NGO like TdH-I felt the need to provide, together with UNDP,
pick-up vans. Another but unsolved problem was the ice shortage affecting fishermen and
middlemen. Only one operating ice factory was left in the Pidie district after the tsunami,
and it became a monopolist producer with severe implications on supply and level of
prices. Some households resumed their own small ice production, but just for themselves.
The need has remained very high for at least two more ice factories in order to cover total
demand. TdH-I was able to come up with only a small segment of the total solution: the
introduction of ice boxes and small freezers managed by local communities.

In South Tamil Nadu, and beyond its effective contributions to economic recovery,
PAD has also faced the difficult task to impulse either a diversification of local
traditional activities, or new types of microactivities in sectors where there was no
previous experience and know how locally. First, PAD started to explore possible
diversification and value added generation in the fishery sector. Two production units
were envisaged in fish drying, and in processing fish and crab pickles. Pickles are in
high demand in India, but proper market research has not been carried out due to
PAD’s lack of marketing skills, and due to prohibitive costs of professional
consultants. Dry fish is for human consumption, but it is also increasingly used in
shrimp farms and for feeding other livestocks. However, the relative high cost
technology for a solar drying fish unit would hardly meet the availability of regular
fish supply, and downstream the possible sale price acceptable by the market.
Consultations with the South India Federation of Fishing Societies have also
highlighted other negative aspects (SIFFS, 2006). There is still scope if SIFFS was able
to organize a wide territorial collection of fish to be dried and processed in a few
large-scale aggregation, production and marketing units. Pickles are facing rising demand in India and overseas, but some brands, meaning established competitors, are already quite present. Price elasticity of demand is also not very high. A second sector was also envisaged, namely mangrove cultivation and aquaculture (an activity better known in Sumatra than in South Tamil Nadu). There are already a few crab and shrimp small fattening experimental units along the coast of Mannar, which use environmentally friendly methods. One of the three core mandates of PAD is to address the protection of the biodiversity and the sustainable development of the Gulf. With German ecological assistance, PAD has started a mangrove plantation and cultivation program. There is reasonable prospect for small-scale aquaculture, which could be developed as household side activity. Marketing and distribution could be handled through self-help groups, PAD and external networks. This strategy could create new opportunities to raise good quality crab, fish and prawn species, and sell them to large seafood firms. As the district will be connected soon to the Indian North-South highway, new opportunities may also emerge for cold storage and refrigeration transport by road. Thirdly, due to its environmental preoccupations, PAD has also started to launch, completely from scratch, a new sector in software education. Among its social and educative activities, PAD has established in Vembar a small computer centre with about 20 computers, software and internet connection. The facility has been used so far as a computer education centre for the rural youth. The computer centre could be further valorized and become eventually self-financed, if not profitable. Several concepts have emerged, and are currently being further studied:

- The computer centre could be up-graded into a small meteorological information unit serving the fishing communities. This would contribute to better fishing and security conditions. Insurance companies could develop their social responsibility and sponsor some segments of this project.

- The computer centre could also serve as a base for ocean biodiversity data collection, ocean engineering, scientific and students/junior staff training activities together with appropriate public and private partners. The computer centre could also become a unit for the development of a coastal and offshore surveillance system, if the government is serious about its protected status as a national ocean reserve.

- The computer centre could also become a reference in terms of disaster preparedness and mitigation. It could store detailed risk management maps and disaster response plans in a region where cyclones and typhoons are frequent.

**Post-disaster economic rehabilitation strategies: some suggestions from the tsunami experience**

The two post-tsunami cases of Aceh (Indonesia) and Tamil Nadu (India) reported in this article illustrate the importance and challenges for linking post-disaster recovery strategies with long-term sustainable development objectives, which have to be appropriate and relevant to local social and economic needs. This viewpoint questions the chaotic and uncoordinated mode of providing recovery aid in various locations affected by the tsunami (Concord/Voice, 2005; Fritz Institute, 2005). It may also lead to a revisiting of the whole approach related to the conception, organization and delivery of post-disaster relief on the ground (Houghton, 2005). This section reviews a number
of crucial issues and tries to pave the way for new post-disaster management initiatives beyond pure rhetoric criticisms.

The problem of post-tsunami macro-level aid overconcentration
Both Aceh and Tamil Nadu have been inundated with aid and money. However, the contrast between the two field case studies presented in this article was deliberate: TdH-CH preferred to target the very poor coastal region of Mannar, which was almost forgotten, instead of joining hundreds of domestic and foreign NGOs in their aid overconcentration in the Nagappatinam district on the road to Pondichery. As a matter of fact, both in Aceh and Tamil Nadu, too many actors have been involved in post-tsunami projects: central/provincial governments and foreign donor agencies, United Nations and World Bank/Asian Development Bank, domestic and foreign NGOs. For instance, about US$ 113 million have been allocated to the Emergency Response and Transitional Recover Programme coordinated by UNDP in Aceh: by the end of 2006, only 71 per cent had been disbursed (BRR, 2006; UNORC and BRR, 2007).

The overconcentration of aid was not only of a financial nature. In terms of priorities of aid allocation, most of the relief addressed two sectors: shelter and housing reconstruction, fishing boats and related equipment. Aid oversupply has been particularly noticeable in macro-level hardware reconstruction, with a difficult shift to micro-level livelihood recovery intervention. In Aceh, large infrastructure reconstruction projects were implemented by big foreign and national agencies. It left NGOs the chance to focus on the micro-level, including reconstruction of local infrastructure for small business to restart. In the case of aquaculture rehabilitation for instance, TdH-I and UNDP have facilitated the reconstruction of ponds through cash for work. Then, the focus was put on small business software to reinitiate production and marketing of fish, crabs and prawns. The question was raised whether PAD and TdH-CH were perhaps lagging behind big donors elsewhere in Tamil Nadu in the capacity of boosting new micro- and small-scale economic activities. However, the situation was not more advanced in the Gulf of Bengal despite high concentration of aid and much better local socio-economic conditions compared to the marginalized Gulf of Mannar. For example, a large institution like Caritas, which was able to raise around US$ 100 million for tsunami relief, had not yet completed by mid-2006 the construction and delivery of about 12,000 new houses (Caritas India, 2005). It was only by the end of 2007 that Caritas started to envisage, but only at a preliminary conceptual level, a microentrepreneurship promotion program.

Large-scale reconstruction versus grass-root recovery
Field observation in India and Indonesia has shown that a clear distinction should be made between two types of post-disaster interventions:

1. large-scale reconstruction of basic infrastructure and housing, having potential grassroot-level multiplier and spillover effects upstream and downstream on the local economy, but hardly addressed by most of the reconstruction projects; and

2. microeconomic rehabilitation in well identified pre-disaster existing sectors, which have been locally addressed by only a very limited number of development aid projects.
Despite the magnitude of the tsunami, the rehabilitation of the local economy has not been identified as one of the reconstruction top priorities. Humanitarian agencies and most development aid institutions have none or few competencies in microentrepreneurship (Lloyd-Jones, 2006). Such grassroots livelihood restoration projects have also much less financial volume and therefore less political attractiveness and public visibility than large-scale intervention dealing with reconstruction of infrastructure, civil engineering logistics, housing and water sanitation, ... Such neglect of grassroots economic recovery needs has also resulted from the absence of pre-disaster and micro-level mapping of existing economic activities in every single location (BPS of Nangroe Aceh Darussalam and BAPPEDA, 2005; IFRC, 2005, 2006; UNORC and BRR, 2007). Such information has never been requested by policy makers in charge of national disaster management planning, even in emerging countries such as India or Indonesia facing major natural hazards every year. In addition, the manner in which large-scale reconstruction projects have been conceived and implemented since the early months following the tsunami has hardly contributed to the boosting of the local economy. On the contrary, most projects of that type have relied on external and large contractors, sitting in far distant major industrial and urban centres (like Chennai, Delhi and Mumbay in the Indian case) or even abroad. No wonder why such well-funded projects have resulted in various malpractices, including client-patron relationships and corruption (Fritz Institute, 2005; World Bank, 2005a).

Grassroot economic rehabilitation is also extremely difficult to design and package, as it must be customized and tailored to the specific conditions of every single location and community. Post-tsunami field observation has indicated that:

- livelihood rehabilitation cannot be envisaged only in pure economic terms. Post-disaster microeconomic revitalization cannot be separated from community and social parameters able to facilitate the process;
- few foreign development agencies can pretend to master such local economic and social parameters, except if they were present on the ground years before the tsunami, and cooperating with local NGOs doing effective work at the grassroots-level; and
- post-tsunami microeconomic rehabilitation has succeeded where grass root-level community participation and ownership have been encouraged from the very beginning of intervention (Swayam Shikshan Prayog, 2007).

In the Indonesian case, a participatory approach has been adopted to involve local district and village leaders in the identification and implementation of the projects. Some cooperation has also been possible with some local NGOs in order to understand the local social and institutional context. This has enabled TdH-I to work faster and more effectively. Sometimes, local collaborations led to some abuse of foreign aid: local leaders were called in to choose the beneficiaries in order to avoid community clashes, and there were conflicts of interest involving bribery and cooptation. The enormous funds initially committed for post-tsunami relief have tempted more than one. TdH-I has been one of many foreign NGOs to realize that poor local governance could mean waiting for the next donor to come.

In the Indian case, the livelihood positive impact of first economic aid delivery could not have succeeded without a strong participatory approach. The role of local communities and self-help groups, coached by a local NGO like PAD years before the tsunami, has paid
The empowerment of village communities has proven to be effective not only to channel microcredit but also to engineer some micromarketing and microfinancial initiatives of their own conducive to more sustainable development of local economic transactions. However, livelihood recovery impulsions made possible by local NGOs and grass-root participation do not necessarily mean that local government and administrative institutions should be always considered as ineffective in the delivery of post-disaster assistance. Both local and foreign NGOs should refrain to attribute exclusively to their own merits what local institutions are able to perform by themselves. In the case of India, local government played a significant role in the post-earthquake reconstruction in Gujarat (2001-2004), whereas it has been much less present and effective in Tamil Nadu after the tsunami (Duyne-Barenstein, 2006; EDII, 2005).

Grants in cash versus microfinance and microinsurance for economic rehabilitation

Post-tsunami field observations indicate that cash for work has been rather intensively used, especially in Indonesia, to facilitate the reconstruction of light infrastructure, some housing, fishing boats, ponds for aquaculture, ... (Adams, 2006; Kumar Anand and Newport, 2005). Microfinance has not been widely used, first because it needs a number of prerequisites to be operational, secondly because it remains to be seen how it can function overnight just after a disaster (World Bank, 2002 2005b).

Microcredit is primarily a tool to boost microsavings at the household and community levels, and then try to cushion through microloans the high variations of income among vulnerable segments of the population, especially to meet sudden and unexpected expenses. Only 15 per cent of total microcredit flows worldwide support microproduction activities, and it is not yet fully established that microfinance should be used as a major financial tool to promote small entrepreneurship, which often requires more capital per small business development project than microfinance can ever supply (Asian Development Bank, 1997).

The Indonesian case study clearly shows that TdH-I did not initiate post-tsunami microfinance projects for the simple reason that the level of community self-organization was too weak to do so (ILO, 2005b, 2006; Doocy et al., 2006). Contrary to India, there was no pre-existing tradition of self-help group networks to finance microeconomic activities, and it took more than two years to start initiating here and there small cooperatives. The Indian case study does not either completely refute or demonstrate the utility of microfinance in post-disaster situations. Microcredit has worked in locations where the degree of prior participatory self-organization was rather high. At best, it is one financial tool among others, which can coexist with other financial instruments and practices, including money lending, as long as access to formal banking institutions cannot be delivered (Kull, 2005; Swayam Shikshan Prayog, 2007).

The Indian case study does neither completely refute nor demonstrate the utility of microfinance in post-disaster situations, which can be envisaged depending on local participatory self-organization. As shown in the case of the Gujarat earthquake, local government can play a role in providing incentives in cash or kind directly to the victims (Duyne-Barenstein, 2006). Cash for work did play an important role in the case of post-tsunami Aceh.

The possible role of pre-disaster microinsurance has been mentioned mainly in the Indian case. Here again, the degree of fishing community self-organization together
with PAD and TdH-CH has inclined to capitalize on pre-tsunami and post-tsunami accumulation of microfinance experiences. In the course of 2007, the local NGO PAD was able to act in the name of several fishing village self-groups and to negotiate a collective microinsurance scheme with an insurance company established in the city of Madurai. This microinsurance scheme can provide coverage if some fishermen are lost at sea, especially in case of typhoons. The premium is sufficient to help a widow to buy some cattle or envisage another type of microeconomic activity to replace the loss of fishing revenue. Beyond this example, one should remain cautious vis-à-vis the growing emphasis by the international community on microinsurance (AIDMI, 2005; Kunreuther, 1996). Microinsurance as a tool to reduce a number of business and family life risks is one thing, whereas microinsurance to reduce the immediate impacts of major disasters is a different matter. Of course, pooling risks in exchange for a premium can provide some protection against losses. However, following a disaster, the most affected people usually receive various types of support from the many others who are not, or are less, affected. Instead of microinsurance, which is inaccessible on an individual basis, most of the poor affected by a natural hazard tend to rely either on family microsavings, or on mortgaging their land and assets, or on emergency loans from moneylenders and traders. Without minimum household savings or family support, disasters may lead to a “cycle of poverty”, as victims may contract high-interest informal loans or default on existing ones, sell assets and livestock, or engage in low-risk, low-yield farming to lessen their exposure to extreme events (Kumar Anand and Newport, 2005; Mechler et al., 2006). The alternatives to microinsurance in the developing world include collective savings and microfinance, informal insurance or arrangements that involve reciprocal exchange such as kinship ties, community self-help, or transfer of remittances.

**Exploring the continuum or contiguum between humanitarian relief and development aid**

Emergency aid is in principle related to any form of sudden crisis. It is short-term by nature and should address the most visible needs as rapidly as possible. There is no apparent reason why humanitarian agencies should link emergency health, food and shelter security to long-term reconstruction. Livelihood recovery and economic rehabilitation are supposed to be handled by national and foreign development agencies, which have different mandates and skills (Lloyd-Jones, 2006). However, this division of labour between humanitarian and development actors can be challenged especially in poor countries, which are structurally vulnerable to various types of natural hazards and pandemics (IFRC, 2005; World Bank, 2005a).

The scale of the tsunami and the magnitude of its immediate mediatization were such that the usual intervention of humanitarian agencies overlapped with the uncoordinated actions of a myriad foreign development and social NGOs, which improvised their respective emergency agenda. A second major source of confusion resulted from the overfinanciarization of relief operations, without any sense of priorities and proper planning (IFTDH, 2005; TDHG, 2005). As a result, the quantity of aid was in excess supply, but did not necessarily include sustainable livelihood recovery, that is how the affected populations could revitalize their own economic and social activities to be back on their feet. At first glance, it seems that there was a problem of continuum between humanitarian and development agencies, meaning that
there was a lack of planning and coordination on how to shift from humanitarian to development action (Houghton, 2005; IFRC, 2006). In retrospective however, the problem was less the absence of a continuum than the lack of any anticipated continuum between humanitarian and development tasks. Post-tsunami field experience has shown that humanitarian and development actions should have been conceived together from the very beginning in order to design humanitarian action as compatible with local development recovery.

In both Aceh and Tamil Nadu, it can be even argued that long-term consideration of livelihood recovery from the very start could have saved later on a huge waste of emergency aid, and could have also prevented the risk of aid addiction. Economic rehabilitation could have been imbricated into the first phases of emergency relief. Furthermore, self-help could have been promoted among the beneficiaries, for instance in the repair or reconstruction of their own housing with local inputs and materials in order to boost employment and income generation at the grassroot level (Duyne-Barenstein, 2006).

In Aceh, the Consultative Group of Indonesia has been a coordinating platform between the Indonesian development planning agency, the World Bank and numerous other governmental and NGO partners, which have produced the main Damage and Loss Assessment for Aceh and Nias. On this basis, rather fair coordination of emergency relief has been carried out by UNDP, whereas the shift to livelihood recovery was more difficult (BRR, 2005a; UNDP, 2006). The most successful emergency projects were based on cash for work by and for locals. However, some other emergency aid projects, like temporary shelters, led by humanitarian agencies or specialized NGOs have slowed down housing rehabilitation, simply because they had no competence at all in such endeavour. Their exclusive focus on real or supposed basic needs did not have always positive impacts on economic rehabilitation attempts carried by others.

In Tamil Nadu, Indian and foreign humanitarian agencies have been rather absent in remote areas like the Gulf of Mannar. Development NGOs, already present in the field prior to the disaster, have transformed themselves into emergency relief organizations within a few months. Pure improvisation was adopted more than once, with little supervision by the Indian authorities. Yet, there has been some coordination effort through the NGO Coordination and Resource Centre (NCRC), mainly funded by the Swiss development agency. The central question is why the NCRC, which was established after the Gujarat post-earthquake experience, has not been more effective in the post-tsunami situation (Duyne-Barenstein, 2006)? In 2001, the Gujarati Government provided reconstruction assistance in cash directly to the affected households. Public-private partnerships were put in place to channel NGOs’ participation, and rehabilitation was either supported by the State, or equally shared with NGOs. In practice, public agencies took the lead together with local owners of physical and business capital lost in the earthquake, whereas NGOs covered less than 30 per cent of reconstruction (EDII, 2005).

**Post-tsunami economic rehabilitation versus development vulnerability**

Field observation in Indonesia and India can feed a debate whether and how far post-disaster economic rehabilitation can be associated with the very concept of development. As shown in the case studies, both domestic and foreign development
agencies define as one of their priorities the restoration of pre-disaster conditions of living mainly in the pre-existing traditional economic sectors. This assertion raises two types of problems. First, neither of the coasts of Northern Sumatra and Tamil Nadu were particularly developed before the tsunami. Secondly, most fishing areas were poor and therefore particularly vulnerable to natural hazards like aridity, typhoons, floods, earthquake and mini-tsunamis, (Anzbalagan and Nirmala, 2005; Régnier, 2007). Therefore, post-disaster economic rehabilitation, even if partly or fully successful, does not necessarily decrease pre-existing vulnerability of various poor segments of local populations (GTCA, 2005; ODI, 2005; Strömberg, 2007; TDHG, 2005). Furthermore, the field case studies have also demonstrated the difficulty to start new microeconomic initiatives even where civil society and social networks are somehow organized and may be prepared to do so with appropriate facilitation support (Nakagawa and Rajib, 2004).

In Aceh, a 2007 evaluation of the TdH-I projects has shown that the rehabilitation resources disbursed have helped local communities to return to their pre-disaster condition. The focus has cautiously been on pre-existing microeconomic sectors providing the bulk of employment and revenue. Some sustainable development inputs have been injected whenever possible, such as the creation of cooperatives and self-help groups. Similarly in Tamil Nadu, direct livelihood assistance has not gone much beyond the restoration of pre-disaster economic conditions. Most resources have been used for housing reconstruction and replacement of fishing boats and nets, and much less for any other sector except support to coastal farmers in restoring land fertility (Geethalakshmi, 2006). TdH-CH has been among the very few organizations able to incubate a few new microeconomic and social activities, mainly because its Indian partner NGO, namely PAD, was already active on the local development front years before the tsunami (Régnier, 2007).

The fine chemistry for starting small business ventures is never guaranteed, even under “normal” conditions (meaning absence of natural hazards). Most domestic and foreign NGOs have little or no expertise in new small business start-up, especially in a post-disaster context. They have neither skills nor staff to identify new potential markets and facilitate access to business development services. The very notion of markets can be even challenged in many parts of developing countries, even under normal times (Prahalad, 2006). When a disaster strikes, it is said that local markets cease to function properly. Wherever the local economy is both formal and informal, it may be more correct to speak of grassroot economic transactions than of properly institutionalized markets. In the context of a disaster, such transactions are interrupted or significantly displaced.

Duration of post-tsunami livelihood recovery intervention

Over two years after the tsunami, many national and foreign development actors are still at work in Indonesia, India and Sri Lanka. When should post-disaster livelihood recovery intervention be normally terminated (Duyne-Barenstein, 2006)? Most operating agencies usually stick to the objective of restoring, if possible, the prior livelihood situation. Once this goal has been more or less achieved, recovery intervention should withdraw. Benchmarking the limits of post-disaster rehabilitation should be a main concern in order to be able to decide when it is time either to go home, or eventually to transform local operations into pure development activities not related
to the prior catastrophe any more. The problem is not only how to assess post-disaster damages, but to compare with the prior economic situation (UNORC and BRR, 2007). Such evaluation might be infeasible in most developing and emerging countries where public administration does not keep detailed economic records location by location, and sector by sector, under normal times, even less in case of frequent disasters. Lack of data and of access to information sources prevail (BAPPENAS, 2005). In Aceh, the situation was aggravated by civil war during several decades. However, an economic and social assessment was conducted in 2005-2006 by local authorities and foreign donors. This proved to be crucial to contextualize some meaningful recovery projects after the tsunami.

This discussion is further complicated by several considerations. A first one deals with the obvious limits of rehabilitating pre-existing microeconomic activities in poor or vulnerable areas located in developing countries (DFID, 2005; FAO, 2005). In other words, the central question is whether post-disaster livelihood recovery intervention should stop there, or whether it should promote not only the replication but also the diversification of pre-existing economic activities, and even support the incubation and start up of new ones able to increase employment and income opportunities.

A second difficulty is to define the sustainability of livelihood recovery and economic rehabilitation. Does it refer to the proper sustainability of those economic activities already in existence prior the disaster? If it also refers to environmental aspects, then development agencies should inject some inputs related to that dimension, even more when a location like the Gulf of Mannar is classified as a national ocean park. If it should also relate to future disaster preparedness, especially in developing areas like Aceh or Tamil Nadu vulnerable to natural hazards, then economic and social rehabilitation should also include disaster awareness and coping strategies so that local populations can anticipate economically and logistically the next catastrophe (IFRC, 2005). Working on long-term and sustainable development issues could have much risk reduction pertinence in countries frequently affected by natural hazards. However, there might be few international agencies ready to commit themselves in the long-term (perhaps just very few OECD countries, such as Japan, are ready to address this enormous challenge).

A third risk lies in the likely reproduction by many development agencies and NGOs – in the name of livelihood recovery and economic rehabilitation – of their own development agendas without full consideration of the characteristics of a specific location and society affected by a disaster. The next question to be raised is why should development agencies automatically transform every single place affected by a disaster into a new long-term development cooperation area? Instead, they could be invited to focus more, together with national and local disaster planning agencies, on the reduction of vulnerabilities to natural hazards and climate change.

A final note should discuss how and how far the surviving victims of a disaster can transform themselves overnight in so-called beneficiaries of humanitarian assistance and development cooperation programs. At most, they may welcome the intrusive nature of external relief to survive, and then to restore their livelihoods in the shortest delays possible so that individual and communitarian autonomy can be re-established. Their degree of openness to foreign developers should be analysed from this angle, keeping also in mind that post-disaster relief does not reach everyone, and can be diverted more than once by client-patron relationships or corruption. Local authorities
and populations may not always understand or be ready to absorb massive humanitarian and development intervention (Fritz Institute, 2005; IFRC, 2006; IFTDH, 2005).

One should also realize that the propensity of natives to absorb natural hazards (of course less exceptional than the tsunami) and to cope with surviving strategies over time is considered as rather high, taking into account that external assistance may be frequently lacking or not be able to reach various isolated locations or marginalized populations. Some disaster observers even argue that strong post-disaster intervention may disturb or displace local development capacities, and that post-disaster management strategies may not always be development friendly.

This last observation may lead us to another wide debate, which is to sanction whether post-disaster livelihood recovery and development cooperation are inter-related or have nothing to do with one another. The very short-term timing of emergency relief and the long-term dimension of any development cooperation process tend to militate in favour of a clear distinction between the two.

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