

Could the system work better? Scale and local knowledge in humanitarian relief

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This article analyses the international humanitarian response to the earthquake in Jogjakarta, Indonesia in May 2006. It also compares it with a small but very successful local initiative. It identifies inherent weaknesses in the international system, and argues for the possibility of scaling up lessons learned from the local example.

KEY WORDS: Aid; Civil Society; Environment; Methods; East Asia

Introduction

Humanitarian relief is not development, but it works on similar ideological principles and is organised along similar lines, often by the same organisations. Relief operations may thus be usefully viewed as sites where a larger relief/aid/development system may be seen in a particularly concentrated and simplified form. Here system and processes are stripped down to their bare essentials in short timeframes without much of their usual ideological and procedural packaging.¹ This article reports on an international relief operation in which elements of success and failure are both discernable. It tells also of an alternative project located outside the international system, in which the ratio of success to failure appears higher. It attempts to analyse the reasons for both success and failure and then to draw conclusions of wider relevance.

Tsunami and earthquake: Aceh and Jogjakarta

In May 2006, 17 months after the Indian Ocean tsunami, a large earthquake struck just south of the city of Jogjakarta in Central Java. The number of people killed (nearly 6000) was lower than in Aceh, the province of Indonesia most severely affected by the tsunami, but the number of houses destroyed (more than 300,000) was higher. The global humanitarian response was considerably less than for the tsunami, possibly because of the smaller numbers killed, less media coverage, and perhaps a degree of global 'disaster fatigue'.² Nevertheless, Jogjakarta became in effect a workshop for putting into practice lessons learned in Aceh.

This article is based on four weeks spent in Jogjakarta in July–August 2006, six to ten weeks after the earthquake, as the initial emergency response shifted into the ‘early recovery’ phase. I spoke with relief workers and attended meetings of NGOs, UN agencies, and government departments. I also travelled regularly through the affected areas, speaking with local people and attempting to convey useful information back into the relief co-ordination system. This is a snapshot of a small part of a longer process, supplemented subsequently via email lists and text/sms contact with some of the villages involved. It is written from a particular point of view. I am on one hand a more or less disinterested observer, with little experience of the aid/development industry. On the other, I am an anthropologist with a disciplinary orientation towards social system/process and cultural difference, as well as 15 years’ research experience in Indonesia, fluency in the national language, and familiarity with Jogjakarta since 1977. My aim here is to analyse this particular response, focusing on strengths and weaknesses in this and in ‘the system’ more generally, with a view to suggesting areas and strategies for improvement.³

The problem: not a ‘complex emergency’

The problem in Jogjakarta was large but not essentially complex, especially compared with the ‘complex emergencies’ involving military conflict which have become the focus of much recent literature (Lindenberg and Bryant 2001: 66; Eade and Williams 1995: 812; see also Terry 2002: 5). Although many people were killed and more injured, it was not a crisis of health, food, or water and sanitation, let alone a crisis of policy, governance, or conflict. It was, at least initially, largely a shelter crisis.

The location was close to a major city, which remained largely undamaged, along with essential infrastructure. Access and communications to most of the affected areas were easy, and essential resources of labour, materials, skills, and organisations were in plentiful local supply. The weather was neither too hot nor (more important) too wet. There was a predictable and arguably not unrealistic window of time (about three months) before the rainy season, but also a deadline and an urgency. This overall picture was obvious within days of the earthquake to anybody prepared to look and listen. The solution was also obvious: to put temporary roofs over people’s heads and then rebuild their houses as fast as possible.

The first part, emergency shelter, began fairly quickly, although 11 months later it was still not complete. Local communities provided the initial response, bringing food, water, clothing, cooking equipment, and labour. These were followed by local or national organisations bringing supplies from elsewhere in Indonesia. Several international NGOs (INGOs) were already in Jogjakarta with emergency teams before the earthquake. They too responded rapidly, bringing international-quality tarpaulins and tents.

The areas affected were generally poor, so only a small percentage of people had the resources to rebuild any but the most rudimentary shelters themselves.⁴ The response of the national, provincial, and local governments was neither fast nor decisive. As it became clear that the government could not be relied upon for leadership, let alone solutions, it became equally clear that these would have to come from elsewhere.⁵ Outside help was needed – lots of it, and fast.

The international response

International relief began arriving *en masse* within days of the earthquake. At its peak there were well over 100 agencies, ranging from large, humanitarian networks such as the International Federation of Red Cross and Red Crescent Societies (IFRC), to multipurpose global NGOs such as Oxfam, to small and specialised ones such as Emergency Architects. The UN

agencies included the Office for Co-ordination of Humanitarian Affairs (OCHA), UNDP, UNICEF, FAO, and the International Organization for Migration (IOM).

Many international personnel arrived from other disasters around the world, particularly Aceh. The post-tsunami operation was notable for the largest-ever global humanitarian response and consequently the largest-ever working budgets for the agencies involved (Telford *et al.* 2006: 20–21). The usual situation of scarce resources in relation to the scale of the task was reversed, resulting in large budgets, competition among agencies, bad design, mis-spending and wastage, all exacerbated by local corruption. These problems were widely known anecdotally and via media reports, and an official report on the response (Telford *et al.* 2006) was published in the early weeks of the Jogjakarta operation. The agencies in Jogjakarta were therefore conscious of mistakes made and anxious not to repeat them. As a result they proceeded even more cautiously than they might otherwise have done.

While there was a wealth of experience and expertise among the INGOs, it related mainly to the logistical and management aspects of disaster relief, rather than in local knowledge. Very few international staff had any experience of working in Indonesia, and if they did it was usually in the different conditions of Aceh. Only a handful had local knowledge of Jogjakarta, let alone any competence in Indonesian languages, or experience in communicating with Indonesians, whether villagers or government officials.

This lack is virtually inbuilt in a system that is essentially ‘globalised’. It consists, like other aspects of globalisation, of an array of resources which originate in various parts of the world but are seen as universal and able to be shifted and deployed anywhere in the world at relatively short notice, ‘... expertise, free-floating and untied to any specific context ... a shared context-independent “development” expertise’ ...’ (Ferguson 1990: 259).

The solution to this lack of local knowledge, in current development and relief ideology and practice, is ‘partnerships’ with local NGOs. The INGO provides the technical expertise and experience, and the local NGO (LNGO) provides the link to local communities, in terms of information flow and practical implementation. There are hundreds of LNGOs in Jogjakarta, some with years of experience and expertise, so it seems a logical and realistic solution; but the reality of forming and maintaining partnerships is less straightforward than the theory. LNGOs vary enormously in size, aims, organisational methods, and operational styles, and this is probably truer in Jogjakarta than anywhere else (Hadinawata 2003: 14–16). They vary also in the degree to which they trust INGOs and are willing to work with them, and in their understandings of how such partnerships should work. So, from the point of view of INGOs, there is a process of research, negotiation, and selection involved. From the point of view of LNGOs, their ability to enter into partnerships was further affected by loss of staff (especially those with the best command of English) to much better-paid positions with INGOs or even UN agencies. LNGOs were also weakened by direct loss of their own infrastructure and staff in the earthquake.⁶

There is an inherent tension, especially in the time-scarce emergency phase, between the ideological orthodoxies of ‘partnership’, ‘participation’, and ‘community based approaches’ and the need on the ground for fast and efficient action. A senior INGO worker admitted: ‘... INGOs are really seeking out “contractors” or “volunteers” rather than partnerships... it’s all about getting it out the door, and paying or begging someone to do it ... Realistically INGOs ... have little time for community response and participation.’

Furthermore, partnerships cannot be simply turned on by signing a document – they are working relationships that take time to build. And time is a scarce resource when the wet season is only weeks away. Significantly, one INGO able to mobilise quickly and effectively was Oxfam GB, whose regional office is in Jogjakarta and has international staff with local experience and established links with local NGOs.⁷ By and large, however, the INGOs, for

all their logistical and management expertise, were not well equipped to deal directly with the people whom they were supposed to be helping, and even indirect communication did not come easily or quickly. But there were other problems of communication and co-ordination. The government's decision not to declare a national emergency limited the power of the international system to act as it saw fit. Instead, the agencies were working within the framework of government planning in a relationship also hampered by lack of local knowledge, experience, and contacts for dealing with the Indonesian government. This created confusion, frustration, and delays for all concerned.

The INGOs arrived independently with their own agendas, priorities, and systems. The main function of the UN agencies (initially OCHA, later UNDP) was to co-ordinate information and the INGOs' workplans and mediate on their behalf with government. However, co-ordination is voluntary, and some agencies co-ordinate more than others. It has been argued that 'there is no such thing as a humanitarian system' but rather a 'complex . . . of shifting actors, diffuse boundaries, partly conflicting interests . . . high diversity . . . and unpredictable outcomes' (Fernando and Hillhorst 2006: 296). This resonates with my observations in Jogjakarta, but there was equally a considerable effort to create system, based on a perceived need for it, but also on an underlying system inherent in procedures and links to sources of decision making and funding.⁸

Most agencies set up offices in Jogjakarta city, with data-collection facilities, meetings, maps, spreadsheets, reports, email lists, websites, etc. International staff seemed to spend most of their time at meetings and collecting and processing information. This was used for reporting to and seeking funding from their respective head offices, which were usually in the capital cities of their home countries. The production of this 'documentary reality' (Escobar 1995: 146) was no doubt essential to mobilise global resources and ultimately local action, but it took time, and drew scarce resources away from the more ordinary 'reality' on the ground. Another consequence was that INGO staff rarely, if ever, got to visit the people they were supposed to be helping.

The focus of the day-to-day reality of INGO staff could be described as 'inward and upward' – inward towards their own internal processes, and upward towards the bureaucratic and funding hierarchies to whom they were responsible – rather than 'outward' and 'downward' towards the very people whom they sought to help. This orientation was expressed dramatically in the architectural form of the UN headquarters for the operation: a modern office block of flashy but undistinguished design on the edge of Jogjakarta, in a newly created no-man's land connected neither to the thriving intellectual, artistic, and political life of the city nor to the villages that were the ostensible reason for its existence. It was chosen for reasons of security and ease of access, and its functions were progressively relocated to various government buildings. However, its form and location were ironically symbolic of its relationships with global and local realities.

Outside the UN headquarters were parked a succession of large, white, shiny SUVs of the various INGOs, in which international staff commuted between meetings, their offices, and their accommodation. The terrain around Jogjakarta is mostly flat and well served by paved roads, so there was little if any need for four-wheel drive traction.⁹ Furthermore, these roads are delightfully human in scale, and travelling on them in a giant SUV would be the spatial and psychic equivalent of driving a tank down a Western suburban street. This problem rarely arose, however: the only INGO SUV that I ever saw among the villages was one that I enticed and guided there myself. My point here is not to take cheap shots at easy targets, but to illustrate a systemic gap in perceptions and indeed in realities.

The international relief operation in Jogjakarta, despite the experience, expertise, competence, and good intentions of the people involved, was working, living, travelling,

communicating, and thinking in a global virtual space that I am tempted to call 'planet INGO'. This planet orbited around head offices in Northern capital cities, rather than the people whom they were supposed to be helping a few kilometres away.

The operation

Humanitarian relief is organised in a global framework of operational 'sectors', including Water and Sanitation, Livelihoods, Food and Nutrition, Agriculture, Education, Health, and Shelter. Cutting across this system is a temporal sequence of 'Emergency', 'Early Recovery', and 'Reconstruction' phases. In Jogjakarta the largest and most critical sector was Shelter, and my observations focused on this. The initial priority was 'emergency shelter': tarpaulins and tents. By the time I arrived, nearly 200,000 had been distributed throughout the affected areas, but exactly where they were needed and where they had gone were less clear. It was also evident that more than 100,000 households were still without shelter, and nearly this number of further tarpaulins were 'in the pipeline' (OCHA 2006).

An 'Emergency Shelter Co-ordination Group' (ESCG), consisting of representatives of many INGOs and some LNGOs, met weekly to discuss the overall situation, as well as receiving reports from smaller working groups. A 'Technical Working Group', which included engineers and architects from local universities, focused on the design of appropriate 'transitional shelters' (T-shelters), based on the simple bamboo structures that have always been the housing of the poor. This decision was based on consensus that there was too little time or money to reconstruct permanent houses before the onset of the wet season. A Public Outreach Working Group prepared posters to instruct communities how to build such earthquake-resistant shelters. The 'Strategic Advisory Group' negotiated with various levels and agencies of the Indonesian government, while trying to formulate overall direction within the uncertain and shifting framework of government policy. Individual agencies were busy establishing partnerships, gathering information about potential beneficiary communities, and seeking approvals and funding from their head offices. This activity within the shelter sector was paralleled by weekly 'Co-ordination Briefings' at the UN headquarters, as well as daily smaller meetings arranged by locality and sector. Within this system, matters of division of labour, nomenclature, and 'terms of reference' assumed considerable importance.

By early August, the reality of the scale of the task in relation to the rapidly closing window of time became increasingly clear. The government and the international effort were moving in opposite directions, ironically in both cases as a result of experience in Aceh. In contrast to what the INGOs saw as a need for transitional shelter, the government opted for reconstruction of permanent housing, but only for a small minority, selected on the basis of 'vulnerability', and there was little chance of any such building starting before the rains.

The international resources appeared sufficient for at best 20 per cent of the total 'caseload', and reaching even them would be unlikely before the rains. Recognising this, and in the hope that sufficient resources might eventually become available from the government, the Shelter Cluster moved to a policy of 'Roof First'. This involved encouraging the government to allow residents to use a proportion of their allocated funds to buy roofing materials for use in a T-shelter and for subsequent re-use in permanent reconstruction. NGOs building T-Shelters were encouraged to adopt this approach as a first step to permanent reconstruction. This revised policy went some way towards resolving the contradiction between the approaches of the government and the INGOs.

On 14 September the Early Recovery Cluster and the provincial governments released a joint statement, outlining the new strategy. At this stage at least 31 NGOs were involved, with plans for nearly 70,000 roof structures, of which more than 14,000 were already built. This left an

estimated 'gap' of nearly 100,000, which it was hoped to bridge by seeking more funding to increase capacity, while simultaneously improving designs, reducing costs, and accelerating production by prefabricating standardised components (ERC/DIY 2006).

The overall picture was one of agencies doing their best in the face of inadequate resources, insufficient time, and difficulties of communication and co-ordination.

Local realities¹⁰

But what about the million people huddled under blue plastic tarpaulins among the ruins of their homes? Once they had rescued the survivors, buried the dead, tended to the injured, cleared the rubble, and realised that the government's early promises meant little, they began hearing about the international relief operation. Some had experienced it directly, in the form of tents and other supplies, but for many it was a matter of stories and rumours. If the INGOs didn't know much about the local communities, the communities knew even less about the INGOs. They had heard of foreigners who had the capacity to help, but unless they had been visited directly they had little idea of who they were, what they could offer, or how they worked, let alone how to contact or communicate with them.

In some cases, partner LNGOs distributed emergency supplies and/or began collecting information about damage and needs. Like the INGOs, they were careful not to make promises about what they might deliver, or when.¹¹ In some cases nothing happened at all – nobody came. So communities waited and wondered, becoming increasingly confused and frustrated. They had no conception of the funding constraints under which the INGOs were operating, or of the agencies' complex and cumbersome bureaucratic processes. Problems and solutions were quite obvious to them – they couldn't see why it needed to take so long. Central Javanese villages are justifiably famous for their communal and egalitarian ethos, and solidarity and co-operation, both inter- and intra-communal, were correspondingly high. But levels of anxiety, speculation, misunderstandings, and rumour were such that there were reports of conflicts between communities, refusals of aid that was not distributed equitably, and even of suicides.¹²

The result: too little, too late

The building of T-shelters began in earnest in September – about four months after the earthquake and a few weeks before the beginning of the wet season. By late December 2006, construction was in full swing, but so were the rains. The final combined commitment of the INGO effort was for nearly 93,000 shelters, about 30 per cent of the total need. By late April 2007 (the end of the wet season), some 72,000 had been constructed, with the other 23,000 'in the pipeline', as well as the 'cores' of nearly 8000 permanent houses (ESCG 2007: 4, 24). Together these reflect at best just over 30 per cent of the total need. A survey conducted around this time indicated that 37 per cent of all households were able to rebuild with their own resources, although this figure looks optimistic to me. If and when the government rebuilds ten per cent, this leaves 23 per cent, but of a total of more than 300,000, i.e. close to 70,000 households, which would contain at least a quarter of a million people. Regardless of the detailed figures, what did not begin as a water and sanitation or health crisis may well have turned into one. The most hopeful sign was negotiations for a multi-donor fund to fill the gaps in the 'too little', if not the 'too late', response.¹³

Does this mean that the international relief effort was a failure? The answer depends on how one looks at it, what standards one sets. At the level of policy, given the resources available, compared with some other disasters, especially Aceh after the tsunami, the relief effort was relatively good, as much because of mistakes avoided as for what it achieved. Aid workers who had

worked in both situations certainly saw it this way. The websites of some of the INGOs involved tell heart-warming stories of achievement, although they give little quantitative indication of the actual situation on the ground, let alone of what was *not* achieved.

Whatever these achievements, from the point of view of the people under the tarpaulins it was too little, too late. The inadequacies were simply the result of insufficient resources for the scale of the task. This was beyond the control of the INGOs on the ground in Jogjakarta, but it was, ironically partly the result of wastages and mistakes in Aceh. The delayed response, however, seems to me to be the direct consequence of policies and practices employed, many of which are inherent in the system itself.

Many of the lessons learned in Aceh were specific to that situation. Jogjakarta was very different in almost every way, socially as well as physically. Consequently the mistakes avoided were not necessarily the right ones to avoid. Lack of local knowledge exacerbated this and resulted in over-cautious and consequently unnecessarily slow movement, especially in the data-collection and planning phases.

The skills of international staff were a critical factor. There is a general skills shortage in the humanitarian sector (Fernando and Hilhorst 2006; Telford *et al.* 2006: 22). But more importantly, the skills sought by the sector emphasise strengths in generic technical and management expertise rather than local knowledge (Richardson 2006: 337). Whatever the skills of the people who came to Jogjakarta (apart from a handful recruited on the spot), they included almost no local knowledge, language skills, or experience (see also Telford *et al.* 2006: 17). This seriously inhibited their ability to understand any but the most material dimensions of the situation at a local level and to communicate with government or local people.¹⁴

Furthermore, staff turnover was astonishingly high (see again Telford *et al.* 2006: 17; Richardson 2006: 337). It seemed that anybody who built up any local knowledge left before they were able to use it. The strategy of complementing generic international expertise with local partnerships, while good in principle, and perhaps feasible in the longer term, was not efficient in terms of time.¹⁵

Systems for data collection, co-ordination, and communication were clearly designed for use within the INGO community and ‘upward’ to head offices and donors – and for these purposes they seemed to work well.¹⁶ But they took time and diverted resources away from obvious tasks on the ground. They also worked less well with parties outside the ‘bubble’: LNGOs, government, and least of all local communities.

The reasons for the delays are thus fairly clear. But are they avoidable? Could things have been better? It is not hard to imagine a system in which individual agencies, or perhaps the UN co-ordinating agencies, had local, or at least country-based, staff with appropriate local knowledge and links to local networks. It is beyond the scope of my expertise, or the purpose of this article, to speculate further on this, but it is perhaps more useful to return to the level of practice, where we might ask: *is there any real alternative?*

The Ngibikan alternative¹⁷

The day after the earthquake, *Kompas*, a major national newspaper, launched an appeal to raise funds. The staff contacted Eko Prawoto, one of Jogjakarta’s leading architects, about ideas for how to use any money raised. Eko went immediately to a village called Ngibikan, in the heart of the devastated area. Only one of its 65 houses was still standing. This belonged to Pak Maryono, head of the village and head also of a team of builders who often worked for Eko. They assembled the villagers and together worked out a basic design for rebuilding. Eko proposed to *Kompas* a project to rebuild the whole village, using local labour and materials. *Kompas* agreed to fund them at Rp.10 m. per house.¹⁸ When Eko staff returned to Ngibikan the next

morning, they had produced a prototype frame and a system for organising their labour collectively to build all their houses simultaneously.

They decided to rebuild permanent houses rather than temporary shelters. Their design was based on a traditional rural house form known as *limasan*, with a tall, elegant, gable roof providing better shade and ventilation than the previous brick and tile houses. The frames were designed to provide inherent resistance to earthquakes and to be easily prefabricated on the ground, then erected with unskilled labour. The main material was not bamboo, for which they predicted a large demand, with resulting shortages and escalating prices, but coconut wood, which, although more expensive, was both more durable and readily available. The roofs were of asbestos-free fibre-cement: quick and easy to install, relatively light, and resistant to corrosion. Eko and Maryono, through their networks of suppliers, were able to obtain good deals and fast supply of all these materials.

They started work within a week, and when I first visited less than two months later all 65 frames were up, about half were roofed, and they had started closing in and subdividing with lower walls of salvaged bricks and upper walls of fibre-cement, and using recycled doors and windows from the old houses.

By the end of August, when the international system was still largely preparing itself to build a range of very minimal temporary shelters, Ngibikan had almost completely rebuilt itself, with houses that are more appropriate in terms of climate, safety, and arguably aesthetics than those they had before the earthquake. It did so in a way that also strengthened community solidarity and shared new skills and knowledge.

The conclusions are obvious: it *is* possible to do much better, and alternative approaches may be much more effective, at least on a limited scale. What are the reasons for this success? What are the differences between this approach and the international one?

Secrets of success?

One obvious factor was funding. In Ngibikan, sufficient money was there from the start. Furthermore it was available when it was needed, without strings attached or complex procedures to access it. *Kompas*, while not a professional donor, showed itself to be an enlightened and very successful one. This was an important factor, but not the only one, or even the most important. Both Eko and Maryono were adamant that they would have built with half the money – or even with no external funding at all. Both insisted that the main factors were the existing resources of the community itself, especially in the form of relationships and knowledge, rather than material resources. These included the ability to produce a realistic design quickly. This in turn depended on the following factors:

- existing building/design skills in the community
- strong solidarity and traditions of collective labour (*gotong-royong*) in the community
- the absence of unrealistic or inappropriate expectations in terms of building style and materials
- local control and sense of community ‘ownership’ of the whole process, which were in turn dependent on
- the small scale of the project.

While Eko and Maryono downplayed their own roles, their skills, contacts, and relationships were obviously important factors: Eko, as link between the community and the sources of funding and design, knew and trusted (and was known and trusted by) Maryono and thus the whole community; as a result he had sufficient local understanding of the community’s resources and abilities to know how far to intervene, and more importantly when not to

intervene. And Maryono is an exceptional leader, in terms of knowledge and skills, but also honesty and commitment to his community. The trust which both the community and Eko had in him provided an essential link to external resources. These links of trust and confidence were mutual. Their established working relationships enabled everything to happen quickly, smoothly, and without complex formal procedures. Finally, their collective knowledge of design, materials, building methods, and sources of supply was a key ingredient.

This is a checklist of factors that enabled a significantly more successful project than the international system. While it may appear a substantial wish list, none of these factors is in itself extraordinary – most are in ready supply in most places, including Jogjakarta. Perhaps less ordinary are their fortuitous combination, and especially their strategic mobilisation in the Ngibikan project.

Less obvious, but equally important, are their invisible flipside – the things that were conspicuous by their absence: large scale, mediation by a complex multi-layered bureaucracy, and implementation on the ground by strangers, devoid of local language and knowledge. Listed this way, the qualities that enabled the success of the Ngibikan project begin to read almost like the reverse of the inherent structural qualities of the international system. Does this mean that the international system is all wrong, and that we have found a better model?

Conclusions: local knowledge and scale

What this evidence indicates is that a radically different, almost reverse, approach can be more successful than the standard international model, at least on a small scale. It also shows that the skills and resources necessary for successful reconstruction may exist in local society. There is, however, also reason to believe that the extraordinary success in Ngibikan was the result of a particularly fortuitous, perhaps even unique, combination of factors that could not necessarily be mobilised so effectively in every village. But the analysis also suggests that this case may embody principles of wider applicability. If so, it raises questions of how best to apply such principles more widely and what, if any, role the international system can most usefully play in such a process.

The factors identified above seem, ironically, not unlike the principles of contemporary development/aid orthodoxy embodied in such concepts as ‘participatory’, ‘empowerment’, ‘community based’, and ‘local knowledge’. The differences lie not at the level of principle but of practice – in the vast gulf between the system of local knowledge and face-to-face relationships of trust that held the Ngibikan project together and the place-less, globalised knowledge and complex hierarchical structure of impersonal relationships which enabled but also limited the effectiveness of the international effort. The other difference is one of scale: every key factor in the Ngibikan project was founded implicitly on the natural scale of the community. The challenge then becomes one of how to translate and apply the principles on a larger scale.

Wider application cannot be a matter of simply scaling up – 65,000 houses instead of 65. Nor can it be simply replicated mechanically, because the requisite combination of factors is not necessarily present in every village. There seem to me to be two possible approaches. One is that suggested by Eko and Maryono themselves: of spreading the method incrementally, by training and mentoring the immediately adjacent villages, where common knowledge and networks already exist, so that they in turn become trainers, mentors, and spreaders of the method to their neighbouring villages – and so on. In this model, the most appropriate role for the international system might be simply as a procurer, channel, and expeditor of quicker and more flexible funding. Such an approach might begin to address the issues of scale, but it would also take time to spread to the scale required.

This leads to another possibility: for the international system to move away from, or at least complement, its present focus on deployment of universal logistical/management expertise, towards a system of more locally based staff with more locally specific knowledge, language, and communication skills. This would enable the agencies more quickly, accurately, and I suspect economically to assess needs, identify solutions, facilitate their dissemination, and locate and channel appropriate and timely forms of funding. This, however, would require a substantial change of direction for the whole system, in terms of ideology as well as practice.

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Notes

1. Since the classic text on the relationship (Anderson and Woodrow 1989), many writers have put forward arguments that cross the relief/development spectrum. One of the more explicit examples is Oxfam GB's policy (Eade and Williams 1995: 800, 825, 836).
2. The earthquake in northern Pakistan occurred in the interim, along with the on-going man-made disasters in Iraq, Palestine, and Darfur.
3. Despite the somewhat critical tone of my observations, I was impressed by the systemic commitment to openness and transparency on the part of all the agencies concerned. Lest it is not clear from my text, I remind readers that my criticisms are not of aid workers, but of aspects of the system in which they are enmeshed.
4. In fact, communities in some of the poorest areas, such as the mountains of Gunung Kidul, rebuilt the fastest, because of available skills and resources. But the vast majority of damage was in the densely populated flat country south, east, and north-east of the city and on the urban fringes. Although these people are less 'poor' in official terms, most had access to neither materials nor funds to rebuild.
5. This was the consensus of opinion in the villages. The opinions of INGO workers varied. My point, however, is not to criticise the government, but to identify a factor that clearly played a part in local and INGO responses. The official report on the tsunami response makes the same observation (Telford *et al.* 2006: 17).
6. Local staff employed by INGOs also played an important part at this interface.
7. Difficulties in partnership arrangements are not uncommon, especially in emergency relief conditions (Telford *et al.* 2006: 22; Fernando and Hilhorst 2006: 198).
8. This system seems essentially similar to that described for the development industry more generally by Wallace *et al.* (2006).
9. Some areas remote from main roads were affected, but there was a widespread local perception that these were least well served by the relief effort.
10. The picture presented in this section is based on many days of traversing the affected areas and talking to local people, longer visits to about ten villages, and repeat visits to two, which I came to know relatively well. Contact has since been maintained by text (sms) messaging. I am grateful to the *becak* (rickshaw) drivers of Prawirotaman who introduced me to their villages, and to the people of these villages, especially Sangrahan, Timbulharjo. I regret only that my interventions on their behalf made so little difference.
11. As a senior INGO worker put it: '*The first rule in this business is don't commit to anything until you have the funding, the materials and the transport all ready to go*'.
12. Again, ironically, basic communication and information-sharing problems of exactly this kind are one of the key failures identified in the tsunami response (Telford *et al.* 2006: 19).

13. Published figures shift constantly and are not always consistent, but those quoted in this paragraph are based largely on official OCHA and ESCG sources.
14. People working in the shelter sector in Jogjakarta believed that lack of technical knowledge and experience in construction were limiting factors. I find this difficult to understand, because the solutions used almost universally were simple structures based on common local rural technologies.
15. My knowledge of this interface between international and local partners is fairly anecdotal. It is, however, a key link in the process and will be a focus of follow-up research in 2007.
16. A survey conducted by the UN co-ordination office towards the end of the operation focused entirely on these issues, rather than 'downward and outward' ones.
17. This section is based on several visits to Ngibikan and conversations and ongoing email correspondence with Eko.
18. This figure was based on the middle-of-the-range of financial assistance for reconstruction promised immediately after the earthquake by the vice-president, Jusuf Kalla.

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