CHAPTER 5

Social and Technical Integration

Introduction

The Pakistan Earthquake Reconstruction and Recovery Project worked to integrate the sociocultural and technical matters, bringing together the main actors: the local people, social mobilizers, project engineers, and contractors. This was especially important to undertake, as differences and conflict frequently had major negative effects in this general disaster reconstruction scene. Figuring out how to get cooperation would reduce losses and allow PERRP's reconstruction to be completed in a timely manner so that the urgently needed educational and health facilities could operate again.

Efforts for integration of the technical and social disciplines not only helped in moving each building along on schedule—such efforts were also related to main principles of disaster risk reduction, which posit that disaster reconstruction needs to be about more than physical rebuilding: "Although short-term needs may be fulfilled by reconstruction projects sponsored by governments or by donor agencies, the real success of reconstruction is determined by the extent to which reconstruction considers and influences the contextual parameters that create vulnerability of the impacted communities in the long term" (Jigyasu 2013). PERRP's social program was designed around these kinds of contextual parameters, especially the area's highly stratified social structure comprising different social groups who normally did not work together and among whom the risk of conflict was high. PERRP worked to integrate the social and technical staff who worked for the project and the steps they took to get design and construction done. The processes chosen also helped integrate the people of the differing social groups, often for the first time, at least over the limited time span of the project.

This chapter examines how the integration was tackled, with content presented in four parts:

- **Part 1** introduces the coordinated technical and social steps selected to carry out all the work before, during, and after construction.

- **Part 2** provides specific details about the project's community participation and how it was decided by the social team, in consultation with project engineers.
- **Part 3** is about the procedural tools and training developed for the social and technical staff to understand each other's roles and coordinate their work.
- **Part 4** addresses relationship building: what it took for technical and social specialists to work together effectively so that community participation could be brought into such a project. It is a look at the rarely considered subject of the challenges and benefits of technical and social specialists working together, and at the factors that support this collaboration.

Part 1: Coordinated Social and Technical Steps

Given the scale of PERRP construction and the limited project time, coordination and integration of the elements was essential. The project involved thousands of people spread over several hundred square miles, at seventy-seven construction sites, all running simultaneously but at various stages over an average time of about three years at each site. With such a large audience in so many public locations it was important for all project staff to be consistent, to sing the same song, to be reading from the same page.

To start this coordination and integration the social team needed to understand more about what design and construction managers would do and how construction would be organized, and to then assess how the community could actually help. From meetings with the responsible project engineers a clear picture emerged of this design and construction's sequence of work and its critical path. From this discussion, we created a list of the main steps the project would need to take—before, during, and after construction. This list is available as table 5.1. The right-hand column shows the main steps that would be taken by the engineers to manage construction, starting with environmental and rapid technical assessments and ending with issuing completion certificates for the one-year defects liability period.

Table 5.1 shows the skeleton of activity throughout the project. It was used as a checklist by the social mobilizers and construction managers, as a reminder of what came next and, for monitoring the social program, of what progress had been made (see table 4.6, Monitoring—Social Steps Tracking Chart).

The left-hand column in table 5.1 lists the social or community participation steps taken. According to the main technical steps to be taken,

Table 5.1. PERRP's Step-by-Step Process.

Social Steps (Community Participation)	**Technical Steps (Design and Construction)**
Each of the below social steps are described in detail in the following pages. See also table 4.6 for how the social steps were monitored.	
Stage 1: Before Construction	
1. Rapid social assessment 2. Introductory meetings 3. Public meetings, willingness resolution, and partnership formation 4. Committee formation 5. Communication protocol and grievance procedures 6. Settlement of land issues 7. Arrangement of land for temporary setup 8. Committee input on design 9. Committee hosts contractors' pre-bid visit	1. Environmental and technical assessment 2. Approval from USAID of design budget 3. Topographical survey and soil testing 4. Solicitation for design contractor 5. Approval of design contractor from USAID 6. Preparation and approval of design 7. Prequalification of construction contractors 8. Solicitation of construction contractors 9. USAID approval of construction budget 10. USAID approval of construction contractor
Stage 2: At the Start of and During Construction	
10. Contractor briefing on social component 11. Contractor-committee agreement made 12. Construction launch event 13. Relocation to temporary site 14. Construction workers' code of conduct 15. First management and maintenance plan 16. Committee capacity building 17. Exit plan developed with committees. 18. Second management and maintenance plan 19. Basic operation and maintenance training	11. Award of construction contract 12. Contractor preconstruction meeting 13. Notice to proceed 14. Routine inspections and quality assurance 15. Health, safety, and environmental compliance 16. Scheduling and cost control 17. Contract administration 18. Progress review meetings 19. Prefinal inspection 20. Punch list items
Stage 3: End of Construction	
20. Committee participation in final inspection 21. Public handover and inauguration 22. Contractor cleanup and restorations as agreed 23. Exit from community, continuation of committees 24. Committee monitors for liability defects	21. Final inspection 22. Substantial completion certificate 23. Operation and maintenance (O&M) training 24. Removal of temporary facilities 25. Handing over of building to owner 26. Contractor one-year defects liability period 27. Completion certificates issued

Note: In this table, as elsewhere in the book, "contractor" refers to the local companies hired to carry out design and construction with supervision by the implementing agency, CDM Smith.

the social steps were decided: what could be done by the social team and committees to support the technical steps in each stage of the project? The committee support was to be provided in several ways, from preventing and solving community-related conflict and other problems to helping develop member and organizational capacities. As shown, the social or participation process was set out in twenty-four main steps, starting with rapid social assessments in each location and ending with the committee having a role in the contractor's defects liability period. Following is a detailed explanation of each of the twenty-four social steps.

Part 2: Community Participation in PERRP—The Step-by-Step Process

Stage 1: Before Construction

1. Rapid Social Assessment

Along with a rapid technical assessment by project engineers, which was conducted to determine which schools or health units were technically feasible for this project to build, the social team carried out a rapid social assessment to determine if there were any strong social reasons for or against building there. Some of PERRP's social assessment criteria included: Had the school been fully functional before the disaster? Was it operating now? Were there any land issues? Did the school have a functioning community-based organization that could work with the project? Was there any conflict?

2. Introductory Meetings

Once a school location was deemed technically feasible for PERRP to construct, the social team began introductory meetings with the head teachers and respected, influential people, as detailed in the first part of chapter 4. After further discussion, the first public meetings were called, beginning the wider participation.

3. Public Meetings, Willingness Resolution, and Partnership Formation

At the first public meeting at each location, which was usually attended by a few hundred people, the social team informed the community about the potential project to rebuild their school or health facility. We explained that the government had requested this construction and that the donor was willing to pay for the design and construction, but that going ahead with the project would depend on community interest and their willingness to participate and contribute. In short, we explained that we would like to form a partnership, where both partners—the community

and PERRP—would have demanding responsibilities. In this partnership, PERRP would take responsibility to build the new building, but since there were no functioning community-based organizations, the community needed to form a committee to carry out a long list of duties—notably, to help the construction process, keep it on schedule, and prevent it from causing problems for the local people. The partnership was also offered on the condition that land issues, if any, were settled before PERRP would take any further steps for design or construction.

In regions where construction and contractors often have a negative reputation, and where construction is often associated with trouble, loss, and conflict, the first public meeting was also an opportunity to start talking about working together and preventing conflict (as related in the anecdote "Introducing Grievance Procedures," page 205). For many, it was possibly the first time that they heard, in public, that their complaints would be addressed, along with the planned process for doing so. They were introduced to the communication protocol with the grievance procedures, and they were informed that the use of these procedures could prevent conflict and should reduce the need for court cases.

After we answered audience questions, they voted with a show of hands. Did the audience members agree to take on such a partnership, form a committee, participate in the project, settle land issues expedi-

Figure 5.1. Voting on a Willingness Resolution. To form a partnership with the PERRP project, community members in each location voted, making a formal Willingness Resolution to form a committee and participate, 2008. © Zia Ahmed.

tiously, and carry out many other volunteer duties? In every case, the answer was an enthusiastic "yes."

At this point, community members were asked to write a simple willingness resolution that formally invited and requested PERRP to proceed, and to state their willingness to accept the duties that were assigned. With this agreement between the project and community, the partnership was formed. Such willingness resolutions have become customary among NGOs working in different fields in the region, as implementing agencies have learned to avoid assuming that help from outside—or help from particular sources—is welcomed by all. Some reconstruction projects have also learned to make sure that community representatives issue a formal invitation and request to work in the community to show the project is not being imposed. This written resolution was kept by the project and committee as part of meeting minutes and other documentation.

4. Committee Formation

At this first public meeting, those in attendance—who often numbered in the hundreds—were requested to ask people to form a committee that would work with PERRP, choosing only members that fit criteria established in earlier introductory meetings with key community members, as discussed on page 133. The process for committee formation applied in both AJ&K and KP province, with one exception. According to the government guidelines, girls' schools in KP province had women-only Parent Teacher Councils, in accordance with the customs of *purdah*. In those cases, a separate committee of men formed based on the same criteria to advise the Parent Teacher Councils and work directly with the project for construction.

5. Communication Protocol with Grievance Procedures

To coordinate the social and technical aspects of work and prevent conflict, the social team introduced the project's communication protocol, which applied to the committee, community members, contractors, and all project social and technical staff. This important management tool is discussed later in this chapter. One of the committee's key responsibilities was to help prevent and resolve construction-related conflict. As some of the committee members were elders or other prominent people whom the community relied on for dispute resolution, this responsibility was highlighted in the first public meeting. PERRP built on communities' dispute-solving traditions, adding new tools to prevent and deal with complaints and conflict, such as the communication protocol with its grievance procedures, written agreements, a code of conduct, and other measures discussed later in this chapter.

6. Settlement of Land Issues

Issues about land ownership can be a significant risk in construction at any time and, as discussed in chapter 2, they were one of the reasons for long delays in other projects in this disaster reconstruction. It is common that differences over land lead to conflict and violence, as well as to court cases that are pursued either for valid reasons or for retribution. These are some of the many ways that power is used or misused by individuals, families, or groups who oppose each other, creating situations that have lasted for years or even decades.

Foreseeing land issues as one of the main things that could go wrong in this project, PERRP made a condition with communities that they would settle any disputes over land before design or construction would proceed. Since committee members were respected, influential people with strong capacities for problem-solving, they were given this task as their first major challenge. PERRP offered a fair, transparent, participatory process to help settle the land issues, enabling the people themselves to settle them.

Despite the *patwari* culture and the reputation for corruption in the land revenue system, these locally based government offices and officials are the authorities, and settling land issues in PERRP could not be achieved without them. To establish the cooperation needed for a fair and transparent process, the social team worked first on getting the buy-in and support of the district's highest administrator, the Deputy Commissioner (DC) or District Coordination Officer (DCO). Meetings were held with the DC or DCO to introduce the project, and have them direct the Revenue Department to assist as needed on the ground. PERRP then had the Revenue Department agree that no fees would be paid by anyone for any reason for their service. Other preparations for the day of the *patwari* survey at each site included an open invitation for any community members interested to attend and witness the survey.

Since many years earlier the government had purchased the land on which PERRP would construct high schools and health facilities, the most common land issue was about exact property boundary lines. Each school or health facility needed to provide PERRP with copies of their ownership or mutation documents, as well as the original cadastral survey map showing the land boundaries, but almost none had these documents on-site and instead had to search for them in faraway government offices. Even if it was claimed that there were no land issues, the same process was conducted to verify this claim.

On the day of the *patwari* survey—which took place on the prospective construction site with a small crowd attending as observers and informal witnesses—PERRP's social team and committee members facilitated a

discussion among adjoining landowners and government officials or their authorized representatives. Participants were informed that:

- discussions and agreements to solve the land issue must be public (with no separate or private negotiations), so that it would be public information with many witnesses
- as a result of the agreement made in public at this event, the Revenue Department and *patwari* would formalize the agreement and promptly issue the renewed or revised legal documents
- no money was to change hands for any reason
- whatever would be agreed on in the meeting would be binding, according to local custom
- negotiation was between the landowners, not between the landowners and the project, as this was their land and school or health facility at stake
- if any landowner would not cooperate or made unreasonable demands to settle a land issue that could affect the design or construction of a new facility (as assessed by project construction engineers also attending), it was up to community leaders and members to persuade settlement on the spot, without delay.

Using the original documents, local knowledge, and debate, participants compared the boundaries in the documents with what the boundaries were understood to be today. In most cases, the boundaries had never been demarcated on the ground and were only noted on the rough hand-drawn map made decades earlier, or remembered in relation to natural features, such as "from that big rock to that big rock" or "to that point of land." The *patwari* conducted a new cadastral survey on the spot, marking out the boundary lines according to the final agreement. As an innovation within this process, community members watched and helped the *patwari* install pegs in the ground to show the boundary line according to what had been agreed on, often for the first time. As they had participated in making the decisions about the boundary rather than having decisions imposed on them, as is normally the case, they protected the pegs until the end of construction. In contrast, when decisions are imposed, pegs are often removed in protest.

By the end of this one day, all paperwork was completed and signed on the spot, or taken back to the Revenue Department. As settling land issues in Pakistan can often take years, doing it in only one day created a celebratory mood and an excitement that design and construction would proceed. For the community members, forming a representative committee had been their first big achievement, but the transparent process

offered by PERRP helped them quickly settle land issues, which proved to be highly motivating in taking the next steps.

Within a few days, the *patwari*'s office issued the new survey and other legal documents, and for the first time ever, copies of these documents were provided to the school or health facility to keep for their own reference. Some head teachers remarked that this alone was of value, as having documents on-site would help them argue against future cases of encroachment or other intrusions on school land. At times, even government officials expressed surprise with how well this process worked.

7. Arrangement of Land for Temporary Setup

In order for construction to start, the rubble of the destroyed building needed to be cleared away. Teachers and students were attending class either in remaining dangerous buildings or outdoors on the same land, sometimes sitting on the stones from the old building or on damaged furniture. Patients were visiting health clinics in the same condition as schools. For construction to be underway, the students, teachers, patients, and health staff had to be relocated. But to where?

For this purpose, the third challenge given to the committee was to arrange a loan of land for a temporary school or health unit site for up to two years. On this land, PERRP would install a temporary tent school or clinic for use during construction of the new building—and for such large tents, flat land was needed. This loan was often difficult for them to achieve, as such land was needed for crops and other productive purposes; in this mountainous region, flat land was scarce and precious. However, somewhat buoyed by the early success of settling land issues, local inhabitants also succeeded at this assignment. In every location, committee members convinced someone to forfeit their land and crop for a few growing seasons so that the tent facilities could be put there. Moreover, most of the owners donated the use of the land with no charges, prodded to do so by committee members. In a couple of cases where land was not available for free, committee members—at their own initiative—paid the rent out of their own pockets or secured other donations for it. These donations had not been suggested by the project, but instead were initiated by the committee members who chose to ask fellow community members to contribute. The courage it took to do this, and to succeed at it, formed the basis for future initiatives, especially the Library Challenge, during which the schools were led to put together their first-ever libraries (see chapter 7).

This process worked because the committee members took their responsibilities seriously and were anxious and enthusiastic to get a school built. Few other reconstruction projects were offering a temporary place

to continue classes. As expressed at the time, land was lent as a gesture of gratitude for the new school.

8. Committee Input on Design
The design of the new buildings was driven by many factors, but part of the participatory process was to get community and end user input. This not only increased buy-in but also helped to prevent costly mistakes and save time. Details of this process are outlined in chapter 6.

9. Committee Hosting of Contractor's Prebid Visit
As normally there is no relationship between contractors and community members—or there is only an adversarial relationship—PERRP took early steps to prevent conflict by putting the committee into an unusual position of power: because they were prepared, they had more power. As part of PERRP's tendering process, a mandatory prebid site visit was held in each community and was attended by all representatives of the shortlisted construction companies. By this point, the local committee had been functioning for months and was well organized. To show contractors that this project and this community were going to be quite different from those at other places they had done construction—places where communities are not organized or involved at all—PERRP had each committee host the shortlisted contractors. This friendly visit showed that the committee was in charge for the community, and that its members would be of unusual help to the contractor. PERRP engineers and committee members walked company representatives around the site and surroundings, pointing out the technical considerations and giving general ideas about the availability of land, water, and electricity. Such preliminary steps helped establish friendly relations between the community and whoever won the contract.

Stage 2: At Start of and During Construction

By the time construction was ready to start, the social program was well established, and the communities were well informed and prepared. Social mobilizers and engineers had a clear picture of each other's roles and what they could depend on each other for. The technical component had prepared the design, obtained the needed approvals, conducted the tendering process, and selected the contractors.

10. Contractor Briefing on the Social Component
Since a structured social component in construction projects is uncommon, if not unprecedented, the companies who won the bids to be PERRP

construction contractors had no experience with such community participation. As part of their preparation to start work, the companies attended a contractor briefing on community participation, on the communication protocol with grievance procedures, and on the "do no harm" guidelines.

The medical imperative to do no harm has been adopted by many other fields, and while the concept applies well to construction, it is rarely used. In PERRP, it was an important tool in conflict prevention: the project asked the contractors to be careful and respectful of the committee and community members, and in turn, the committee would help them during the project. Contractors were asked to do no damage or harm to people, their property, their relations, or their culture; to not assume they could use people's land, water, or resources without their permission; to not do any damage to buildings, other land, trees, or natural resources; to not break cultural norms; and to not cause problems between local people. These and other requests were written into the Committee-Contractor Agreement.

11. Committee-Contractor Agreement

As obvious as it might seem, many problems could be prevented by making an agreement prior to construction, but this is rarely done. As discussed in detail in the second part of this chapter, "Integration Tools and Training," committees and contractors were led to make a point-by-point agreement in writing.

12. Committee Organization of Construction Launch Event

As soon as the contractor was ready to put shovels in the ground, the committees organized public events to launch the construction. Such events were large gatherings, and were attended by the teachers, students, parents, local officials, donor representatives, and hundreds of community members. After suffering the destruction of their old school or health facility, the loss of life, and doubts that these facilities might ever be rebuilt, the public launch was a big celebration. Speeches by local officials, students, school or health facility staff, and prominent people usually attested to the hope that the project gave them. To emphasize that the committees were in charge, the project did not organize this event or pay for any of it, as might otherwise be standard practice for a foreign-funded project. Committees were advised to stay within their means: they were advised to hold no-cost events, but it was up to them what to do.

13. Relocation to Temporary Site

Now that construction was ready to start and the committee had arranged land for the temporary tent school or health unit, the contractor was re-

sponsible for setting up that site's temporary tent classrooms, offices, water supply, toilets, wash basins, and other necessary facilities. Once set up, teachers and committee members helped move students and school operations from their old destroyed facility to the new site, freeing up the original land for construction to begin. In the same way, health unit staff and their committees moved their operation to the temporary tent clinic.

14. Construction Workers' Code of Conduct

Contractors from different parts of Pakistan brought their work crews to do the earthquake reconstruction. Following the first life-threatening incidents around construction sites in response to workers breaking local cultural norms, the social team developed a construction workers' code of conduct to try to prevent these kinds of problems. Workers from other regions and cultures of Pakistan needed to be briefed on the kinds of behavior expected in these conservative rural areas. Serious breaches of the norms could damage local people and cause retaliation against workers and construction. See anecdote "Serious Cultural Breach," page 68.

To develop the construction workers' code of conduct, social mobilizers worked with each committee to draw up a list of the most common cultural breaches, along with specific ways to prevent them. For example, in their off-hours, workers often wandered around the close-knit, conservative community, sometimes getting into private or sensitive locations where women might be gathered together—for instance, at water wells. The solution was for each community to identify the places the workers could not go. Another problem was that the laborers would sometimes act or speak disrespectfully to local people or get into heated political arguments. In the code of conduct, they were asked to avoid political discussion and to respect local people like they respect their own family members.

At each site, workers were briefed on the code, and contractors were obliged to have their workers honor it. At the briefings, elders welcomed the laborers to the community, thanked them for coming to this far off place, and appealed to the workers to respect the norms. Although there still were a few instances of significant breaches of cultural norms during PERRP's six years, some causing serious fights, the frequency was significantly reduced by the community, contractor, and construction workers' clear and firm expectations.

15. First Management and Maintenance Plan

Once the new buildings were constructed, the committees were to be responsible for sharing maintenance of the new buildings with the government. To raise awareness about these duties, they were started at

the temporary tent sites. The social team led the committee in analyzing maintenance needs and determining what work would have to be done, by whom, and when, how, and with what resources. This first management and maintenance plan was made and then executed by the teachers, students, and paid cleaning staff (if any), with the committee acting as monitors. These duties were also part of the Committee-Contractor Agreement.

16. Committee Capacity Building

While even the poorest, most remote communities can have significant capacities, these strengths are often overlooked by external agencies. On the other hand, if agencies were to seek out these strengths, such as was done with PERRP's capacities and vulnerabilities analysis exercise (see chapter 4), they would find potential and opportunities in the local communities. For example, in the school and health committees, members' abilities and interest in helping construction were apparent early on, and the project introduced additional activities to enable the committee members to increase their knowledge about construction and, in the case of school committees, how to help improve education. Other activities included participatory performance assessment, the introduction of cocurricular activities, and fundraising for their schools' first-ever libraries.

As committees at health facilities were only for the purpose of facilitating construction and had no community participation in health activities—as per the directive of the Department of Health, and related in the anecdote on page 110, "No to Community Participation!"—committee member activity was limited to construction-related matters. But for the communities in which schools were being built, an important part of capacity building was regular attendance at joint workshops that, every few months, brought together the head teacher (as general secretary) and the chairperson (community representative) from all the PERRP school projects. The first school committee joint workshops included a visit to sites under construction, so that committee members could hear the latest plans from designers and engineers. These early workshops helped to build trust and confidence in the PERRP process. As projects developed, committee members began to develop their own agendas for the joint workshops. Members commented, "Now that we see our school's reconstruction actually is starting, we want to talk about our other problems too."

These joint workshops motivated committee members to share news and ideas from their own schools, and even to develop a healthy sense of competition as they told each other about what they had achieved: their first ever parent-teacher meetings, new and increased numbers of cocurricular events, and unprecedented attention and assistance from the community. The workshops were also used as a platform to carry out a

participatory study on problems in education and to subsequently develop a plan of action. The unity and spirit developed through the committee joint workshops also grew into the remarkable Library Challenge, which is described in chapter 7. As with other community member participation, no fees or stipends were paid for any purpose on this project. Committee members attended all functions, including meetings and the workshops, at their own expense—a feat that is highly unusual in foreign aid projects in the region, which usually pay some level of fees or allowances. Even so, attendance at PERRP gatherings was almost always 100 percent.

As part of PERRP's internal monitoring to document and assess participation, the committees were led to collect, analyze, and report their own data on a yearly basis. This process was facilitated by a social mobilizer in a participatory performance assessment (see the participation index described in chapter 4). This was another new experience for committee members.

Before the earthquake, parents and teachers in this region normally had little or no contact with one another. Schools were considered the domain of head teachers and teachers. Parents were expected to leave their children's education up to the educators, and many did not feel welcome at the school. At the same time, there were normally no school activities other than classes. PERRP capacity-building led the committees to support teachers in different ways, including through the introduction of new activities. Committees did this by assisting with volunteer work and funds to run low-cost in-school activities such as contests, demonstrations of public speaking, drawing, spelling, essay writing, skits, poetry recitation, singing, sports days, plantation days, reunions, parents' days, and national holiday celebrations. Some committee members had related skills they could apply in such activities. Through these activities, committees brought together parents and teachers—in some places, for the first time ever.

17. Exit Plan Developed with Committees

To prepare committees for the time when construction would be finished and PERRP and the social mobilizers would leave the community, discussions about an exit plan began about midway through the project. What would the committees do when the project was finished? Would they continue to meet? For what purposes and activities? Plans were made for committees' continuation after the project.

18. Second Management and Maintenance Plan

After practicing maintenance of the temporary tent school or health facility for several months, and when construction of the new building was in its final state, the maintenance planning exercise was repeated, and a second management and maintenance plan was created for the new facility.

19. Basic Operation and Maintenance Training

Once teachers and students were moved into the new school, or staff into the new health facilities, PERRP provided basic operation and maintenance training to facility users and staff. This training covered what to do if the building had an emergency, including how to use a fire extinguisher and circuit breaker, shut off the water valves, and control the water pump.

Stage 3: At End of Construction

20. Committee Participation in Final Inspection

In Pakistan, when construction of a new public building is complete, it is normally handed over to the owner without any community involvement. In PERRP, since the committee had taken responsibility all along and deserved recognition for it, they were invited—along with government officials, the construction contractor, PERRP engineers, social mobilizers, and representatives from either the Department of Education or Department of Health—to walk through the building and to participate in the final inspection. As a final show of recognition of the committee's contribution to getting the school or health clinic built, PERRP placed a series of construction photographs in the entryway of each building, as well as a permanent plaque listing the committee members' names. For committee members, this was an unexpected honor and, for many, an emotional time.

21. Public Handover and Inauguration

With all construction and interiors completed and furniture moved into place, responsibility for the new building was handed over to either the Department of Education or Department of Health at a special public event organized by the committee. This was a special celebration, and the committee put their new organizational skills to use for this event. Such events were attended by hundreds or even thousands of people.

As with all such public events in this project, the committee was the organizer. Committee members once again called on their own skills and experience as organizers of large political, religious, or family events in planning these inauguration events. Members raised the funds and had businesses contribute by loaning the necessary resources, including stage and sound systems, chairs, overhead tent-like coverings, banners, and refreshments. Inaugurations were large events attended by representatives of USAID, the government of Pakistan, the government of AJ&K or KP province, and the media. Communities saw the completion and handover of the new building as a symbol of hope and a turning point in disaster recovery.

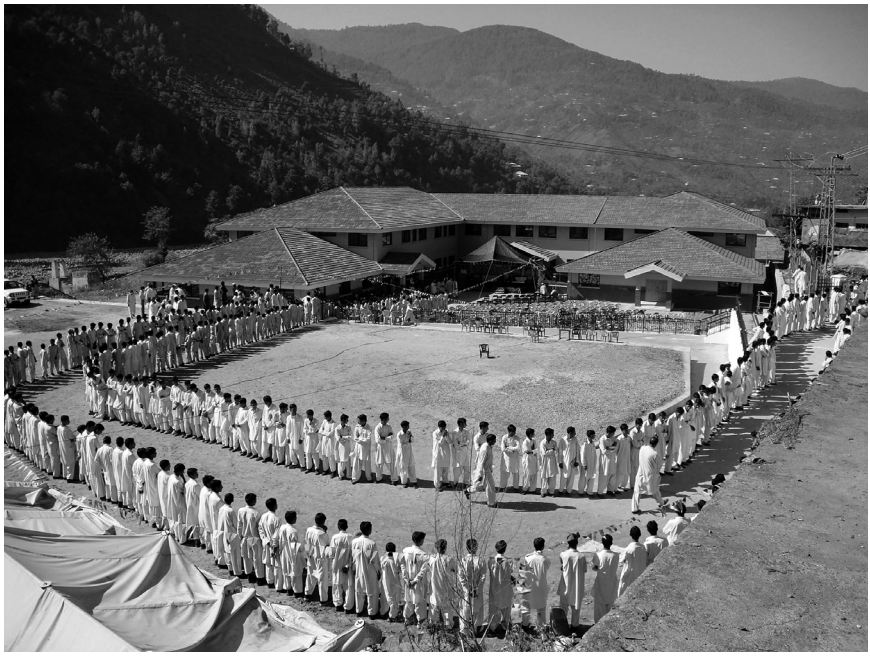

Figure 5.2. School Inauguration. Upon completion of construction of each facility, the committees organized inaugurations. Here in front of their new school, students formed an honor guard to welcome officials attending the celebration. Government Boys' Higher Secondary School Rerra, 2010. © Sardar Zaheer Mughal.

22. Contractor Cleanup and Restorations as Agreed

As per the Committee-Contractor Agreement, the contractor performed a cleanup and restoration before leaving the community, removing all materials and equipment and restoring all local land to its preconstruction state. For example, if a temporary track had been made to access the site by vehicle, and if the committee and involved landowners wanted it removed, it was removed.

23. PERRP Exit from Community and Continuation of Committees

When all work was completed, PERRP staff left the communities. Committees then were to continue and implement the plans they had made; however, this did not occur, as discussed in Chapter 4, Part 2.

24. Committee Monitoring during Contractor Liability Defects Period

For one year after the completion of construction, contractors were liable for any defects that might appear in their work. As PERRP was no longer present in the community, it was a duty of the committee to watch for any

defects and report them to the PERRP office. PERRP would then have the contractor correct the defects.

Part 3: Integration Tools and Training

Three key tools developed in PERRP helped to create a friendly, responsible, and respectful atmosphere. These tools helped build the capacities of the technical and social staff, committee, and contractor; and they reduced conflict, preventing issues among the local people and saving a great deal of time that could have been lost in construction. These tools were designed to coordinate and integrate the social and technical components. At the end of the project, during "lessons learned" exercises with both social mobilizers and engineers, these tools were assessed as determining much of PERRP's success:

- the communication protocol with grievance procedures
- the Committee-Contractor Agreement
- the training together of the social and technical teams

Communication Protocol with Grievance Procedures

It was well known that disputes and conflict were common at other postquake reconstruction sites. We saw that these problems stemmed from a lack of organization and local leadership, from having no way to handle grievances, from a lack of coordination around the construction site, and from the resulting adversarial relationship between the contractor and local people. Having a committee for the purpose of facilitating construction allowed for a new organizational structure at the construction site. This put the committee in an unusual position of power, virtually equal to that of the contractor. Accordingly, PERRP encouraged and supported the development of friendly, mutually supportive committee-contractor relations.

To reflect this new arrangement of influence and power, and to coordinate and streamline information and activities, the social team introduced a communication protocol that included grievance procedures. The idea was that grievances would be handled the same way as other information. This completely changed the ineffective and risky ways in which community members and contractors usually would interact with each other. As much of the conflict around the construction site was a reaction from people having no way to have their complaints heard, the PERRP grievance procedures instructed project staff to listen to complaints and act on

them immediately. This helped "people disengage and establish alternate systems for dealing with the problems that underlie the conflict" (Anderson 1999: 1).

The communication protocol with grievance procedures set out the lines of communication. As shown in figure 5.3, under this new structure all people involved would be treated according to the separate but coordinated social and technical sides of the project. The communication protocol with its grievance procedures included a set of rules about who would communicate with whom, and how grievances could be made and settled.

The protocol was simple. Social mobilizers worked exclusively with the committees, while the project's site engineers worked only with the contractor. For maximum transparency, community members and their com-

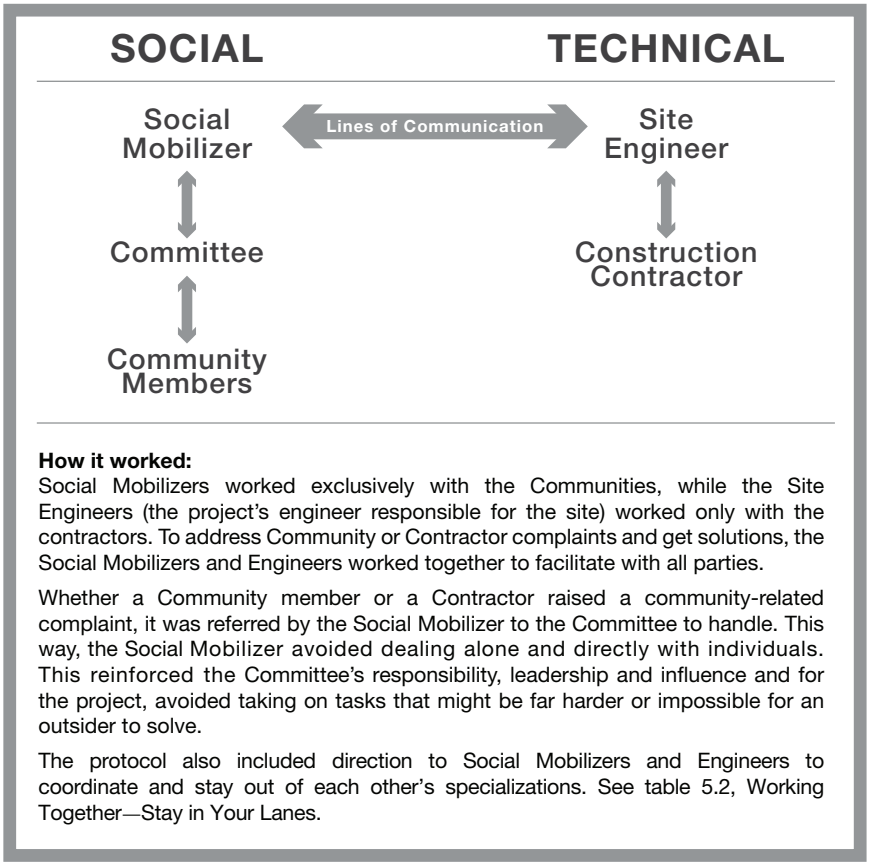

Figure 5.3. Communication Protocol with Grievance Procedures. Also see table 5.2 for how the social mobilizers and site engineers were to work together by staying in their lanes.

mittees were discouraged from dealing directly with the contractor, and vice versa, unless it was an emergency. Whether a community member or a contractor raised a community-related complaint, it was referred by the social mobilizer to the committee to handle. This way, the social mobilizer avoided dealing alone and directly with individuals. Assigning local responsibility this way reinforced the committee's responsibility, leadership, and influence and avoided having the project take on tasks that might be far harder or impossible for outsiders to solve. All such complaints were to be dealt with right away, and were usually handled within minutes or hours, either face to face or by cell phone. The protocol also included direction to the social mobilizers and engineers to coordinate and stay out of each other's specializations (see table 5.2).

Committee-Contractor Agreements

In PERRP's "lessons learned" workshops, there was consensus that the innovation of a Committee-Contractor Agreement was one of the main reasons for cooperation between the community and the contractor. This agreement reduced local loss and conflict, which helped reduce the number of lost construction days. This relatively simple document, which had been made in mere hours, was probably responsible for saving months of lost construction time and also establishing the respectful working relationship.

When the construction contract was awarded, and even before the formal notice to proceed was issued to the contractor to start construction, each project site required a community-contractor agreement. While the community was informed well ahead of time of what the contractor would likely need, thus allowing committees to start working out solutions, the agreement would come together the day the contractor arrived at the site.

On the designated day, a meeting was held to create and sign the agreement. Held on-site, the meeting was attended by the full committee, the contractor, and the key technical people who would work on site. The meeting was facilitated by the social mobilizer and site engineer. In each case, the contractor was asked to list the things they would need—for example, a certain amount of water supply, electricity, access across other land, or a rental agreement. Then, point by point, the committee was asked for their suggestions. Could they help supply each need, whether paid or free of charge? Likewise, the committee was asked about what the community wanted to happen and what they wanted to avoid. For example, they were asked about traffic, dust, noise, a laborers' camp, the potential for loss of privacy, and the behavior of workers.

On each point, the consensus was put into writing as the Committee-Contractor Agreement. Over time and as needed, the Committee-Contractor Agreement was altered or added to, as long as both parties agreed. It was treated as a valuable document and used as a reference by all parties for the entirety of the project. It was also often used by community members among one another, as reminders of what they promised to do. The agreements included many different terms, with each one custom made in each location by the people involved.

While these agreements varied place to place, typical content included:

- **Land**. Outside the school land, what other land or space was needed, for what purposes (e.g., for a site office or residence, or to store equipment or materials), and for how long? Who owns the land, and what would be the terms of use?
- **Water**. How much water was needed for what purposes, when, for how long, and from what locations? What would be the terms of use?
- **Electricity**. What amount of electricity was needed, for what purposes, for how long, when, and from where? What would be the terms of use?
- **Site access across other land or sensitive areas**. To reach the construction site, would the contractor need access across other land where direct access might be blocked? What land would they need to cross, and who owns it? How could access be guaranteed? How long was it needed? What would be the terms of use?
- **Safety precautions**. What safety precautions would be needed? Who will take them and when? If blasting for excavation had to happen, would advance notice and protection be given to local people?
- **Laborer camp**. Would this community allow a laborer camp here? If yes, where, for how long, and under what terms? If no, where might be an alternate place?
- **Jobs**. Would the contractor hire any local workers?
- **Respecting cultural norms**. These communities are conservative with their own cultural norms. The contractor would need to protect the privacy of the surrounding buildings. How would the contractors' workers, who may be from other cultures, respect the norms and not cause disturbances?
- **Additional work outside construction**. What if someone were to make demands that work be done on their own property, which was not part of the construction contract? How would that be handled?
- **Days and hours of work**. Does the community agree with the proposed days and hours of work at the construction site? The commit-

tee usually asked the contractor to make sure there was at least one day per week that was free of noise or dust.

Training Together

Each site had a designated social mobilizer and site engineer who worked as counterparts. The social mobilizer worked with the committee, while the site engineer was on the site full-time to supervise the contractor. The social mobilizers and engineers were trained together and developed strong working relationships. The training exercise below—dubbed "Who is Going to Do What About This?"—shows how PERRP staff were trained to apply the communication protocol with grievance procedures. In this joint training exercise PERRP social mobilizers and site engineers were asked to sit together and analyze case studies from actual incidents, identifying the actions that should be taken—and who should take them—according to PERRP's communication protocol with grievance procedures or other agreed procedures.

Case 1: Petty Contractor Left the Job without Paying Local Suppliers
A petty contractor has left the job without paying local suppliers, who are threatening to block construction tomorrow and get a court stay order to stop construction. If the stay order is granted, it could disrupt or halt construction for months or even years. In the meantime, the local suppliers' businesses will suffer too. *Who is going to do what about this?*

Case 2: Elite Demands Unrelated Work
For their own benefit, powerful people sometimes try to get work done which has nothing to do with the planned construction. In one of the PERRP communities, the "big man" down the road is demanding that drainage pipes be installed on his land—drainage that has nothing to do with the construction project. He claims if he doesn't get this work done and soon, he will make trouble for the project. *Who is going to do what about this?*

Case 3: Stop the Water Supply until the Bridge Is Fixed
Although the community had agreed in the Committee-Contractor Agreement to let the contractor use their limited personal water supply in exchange for him making repairs to their nearby bridge, they have cut him off because he has failed to fix the bridge. Now there are two problems: the bridge is too weak to bring in heavy equipment, and there is no water for concrete work. Everything is stuck. *Who is going to do what about this?*

Case 4: Dispute within Family over Lending Land
Social mobilizers have worked for weeks to have the community identify a suitable site for a temporary tent school to be installed. In this mountainous area, the flat land needed for such a large arrangement of tents is scarce and always in use for crops. However, community members finally convince one family to let their land be used and make a loan agreement with the School Management Committee. However, when one of the landowning brothers returns from working abroad and hears about this agreement, he is furious and refuses to agree to the loan, making ominous threats. The contractor is arriving in the next couple of days to start installing the tents, and if this installation is delayed, it will postpone the construction of the new school. Community members, social mobilizers, the project's construction managers, and the contractor are all frantic. *Who is going to do what about this?*

Case 5: Threats for Jobs
Local men are making threats of violence against the construction contractor to hire them. They were making the threats even though it was part of the Committee-Contractor Agreement that the contractor would bring in skilled work crews and not hire from this location. *Who is going to do what about this?*

Case 6: Laborer Visiting Place Reserved for Women
A construction site laborer from another culture and part of Pakistan was caught by a local man hanging around the water spring where women were washing clothes—a location meant only for women. Taking this as an offense to local cultural norms, the local men beat up the laborer, and more community members rise up against the offender and his fellow laborers. Given that there are several dozen laborers on site, this situation could escalate into a community-wide fight, with potentially fatal injuries and stopped construction. *Who is going to do what about this?*

Case 7: Two Contractors Fighting over Road Construction
As PERRP construction of the new health unit was underway in a remote, mountainous area, the earthen road that passes by the construction site was being upgraded by another contractor for the government's Department of Roads. Each contractor is blaming the other for damage to the road near the entrance to the health unit. The anger is spreading and could easily turn into conflict between the two sets of laborers. *Who is going to do what about this?*

How Joint Training Worked

Occasional training and workshop-type discussions on the communication protocol, such as those in the above training exercises, served to refine and deepen understanding and usage of these protocols. Participating in these discussions were the social mobilizers, site engineers, and their supervisors; this was particularly important as this collaboration was a new experience for all. As construction projects rarely include social specialists, the engineers on previous projects had been left to deal with the people themselves, often unsuccessfully. In contrast, the social mobilizers had community expertise, but little or no experience with construction. The protocol helped delineate their roles while making them complementary, as discussed in "Relationship Building among PERRP Engineers and Social Mobilizers," next page.

The grievance procedures that were part of the communication protocol differed from normal practice in construction. Before, if construction projects had any grievance procedures at all, they were either informal and unknown to the people, or too weak to be effective. A PERRP engineer gave one example that he knew of from other construction sites: having a complaints book at the gate of the site. That process depended on complainants being literate, and on written complaints being attended to instead of ignored. In PERRP, the complaints process was part of day-to-day communications and action.

Normally, if contractors needed something locally, they would simply arrange it themselves in a private deal. If they needed a water supply, electricity, or a place to make a camp for their workers, they would find somebody willing to supply it, and make an informal verbal agreement with them. However, from the "What Could Go Wrong?" analysis, we knew these informal, private, verbal arrangements were the cause of many problems. In PERRP, the contractor was to make no private deals: all needs were to be funneled through the committee, and all such deals were made public, handled transparently, and put into written form in the Committee-Contractor Agreement. The site engineer and social mobilizer were responsible for ensuring that all business was handled this way.

There was only one exception to the communication protocol: in an emergency, or if any danger arose, it was not necessary to go through the prescribed channels. If a fire broke out, an injury occurred, or if members of the public came out on the construction site when banned from doing so for safety reasons, the normal protocol did not need to be followed. In such cases, the contractor, community members, or committee members were encouraged to take immediate action as needed.

Part 4: Relationship Building among PERRP Engineers and Social Mobilizers

Postdisaster reconstruction has drawn attention from a multidisciplinary community of specialists, which can be grouped into two broad categories: those dealing with the physical aspects of the built and natural environment such as architects, engineers, and planners, and those concerned about the social, cultural, political, and psychological aspects of reconstruction, led by anthropologists, sociologists, and other social scientists. "Unfortunately the disciplinary backgrounds that empower all these specialists with tools and methodological processes many times also act as blinkers restricting their vision from looking beyond their narrow disciplinary confines and seeing the complexity behind seemingly simple observations of reconstruction processes" (Jigyasu 2013: ix).

The above ideas raise the subject of technical and sociocultural specialists, and their ability and willingness to work together. Jigyasu posits that aspects of each discipline make it difficult for practitioners to understand other disciplines, while also making it easy to miss their complexities. But speaking as a sociocultural specialist with decades of experience working with specialists from many disciplines—including health, education, economics, law, agriculture, forestry, trade, microfinance, water management, and environment—no matter the specialty, there are often blinkers that hinder recognition of the complex cultural or social side of one's own field. For many, there simply is no awareness that there is a social side to their work. Either the education of such professionals offers no sensitization to the sociocultural dimension of their work, or that knowledge simply is not put into practice.

This also raises the subject of cultures and communities, specifically of engineers, sociocultural experts, and all their possible interrelations. If each of these two disciplines were analyzed individually, using the same vocabulary that is applied to the study of culture and communities, it could very well show that, even within the engineering community and the sociocultural specialist community, we can find heterogeneity, class-based hierarchies, arrangements of power, and many other similar divisions. How these disciplines view each other might not only be restricted by the blinkers described by Jigyasu but might also be a matter of culturally entrenched classes and hierarchies. This section, then, raises a rarely discussed question: how can technical and sociocultural specialists work together effectively? I do not attempt to answer this question broadly—this chapter will only recount how this work was undertaken in PERRP.

The Challenges

In PERRP, there were some initial challenges in having engineers and social mobilizers work together. Two sets of factors affected working relationships in the start-up period.

The first set of factors was the existing biases, prejudices, and stereotypes that the technical and sociocultural specialists each held regarding the other, along with the little knowledge they had of each other's expertise and usefulness. There was also the fact that engineers were used to working alone on any construction site. As projects do not normally have social expertise to resolve conflicts, engineers had been left to try to solve community-related problems. Not only had they been responsible for aspects of managing construction, but when something happened with local people, they or a delegate would have to try to address it. Depending on their style, they could ignore people, issue orders, take punitive steps, try to negotiate, or pass on the problem to authorities. Now that this project had a social team to look after all the social issues, there were mixed reactions: some were openly opposed, and others were just unsure what that would mean.

The second set of factors is common among any group of people, even those from the same discipline, who for the first time are coming together to work. These challenges, which are encountered by NGOs, corporations, and other institutions, fall into the realm of human resource development, group formation, or team building (Stein, n.d.). Stages in the framework used here are referred to as forming, storming, norming, performing, and adjourning. These are typical stages that groups of any kind go through. While at the beginning there can be uncertainty, misunderstanding, and friction, as members figure out how to work together, they can go on to perform effectively even in the most complex situations. These teams often form strong bonds and friendships, and they usually come to regret that the project and team must come to an end, which was the case in PERRP.

Team Building and Development

Year One: The Storming Stage

In PERRP, there were two distinct time periods in the development of working relations: the first year and the time that followed. Taking a frank look at those first few months, we can see that sociocultural and technical specialists sometimes perceived each other through stereotypes, throwing blunt accusations. To the social mobilizers, some of the engineers were heartless technocrats who were concerned only with the speed of work, their bricks and mortar, and their desire to get the job done. To engineers,

the social mobilizers were overly protective of the local people's interests and inclined to raise unnecessary issues, inciting people who would make nuisance complaints, and interfering with the project's "real" work: building. One engineer often described what the social mobilizers were doing as only "drama." At first, the work of the social mobilizers was invisible to some engineers, who said that "the mobilizers are just out there sitting in the villages, drinking tea and chatting with the people." The engineers did not understand that such sincere and friendly discussion was building relationships that would lead to the problem-solving processes for construction. See anecdotes, pages 208–10.

Such stereotypes came from lack of experience in each other's disciplines. Only four of the twelve-member social team had any previous experience working with construction, but all had considerable experience organizing in their own or in other communities. In contrast, the dozens of engineers were highly experienced in construction, but none had experience working with social mobilizers in a structured community participation program. While community participation has been a well-developed subject in development projects in Pakistan, with projects in every sector at least claiming to include it, there was also the rhetoric of "community participation," which was often misused the in the reconstruction scene, as discussed in chapter 3.

While some engineers at first resisted the idea of community participation, some social mobilizers also questioned the way that construction would be carried out. Knowing little about the complexities of design and construction, some wondered: Why would the project contract out all the construction to commercial firms? Why not get the villagers (and train them if need be) to build the new facilities themselves? As engineers' ideas changed by witnessing the advantages of community participation, the social mobilizers' questions also vanished as they learned more about the level of skill and the number of skilled laborers needed for large-scale reinforced concrete work. Many skilled laborers from the project area were away working in the Gulf States, and with all the earthquake reconstruction occurring, the high demand for laborers meant they were scarce. It would not be practical to train others to the skill level needed in the finite time frame of the project, and contractors already had their own skilled work crews from other parts of Pakistan. While social mobilizers thought that local hiring might have been ideal to create jobs, it was a matter of not understanding the complexities of this reconstruction.

Building Understanding and Relationships

After the first few months, working relationships started to change, bridging the initial gaps in understanding. The change began as communications

improved: the counterparts developed an understanding of one another, their jobs and their joint process became clearer, and results were being seen. Both engineers and social mobilizers had to figure out what work needed to be done, which work needed to be done together, and how it would be done and when. Getting to this point came from a number of participatory critical analyses, including the "What Could Go Wrong?" analysis, the training they received together, and the creation of the joint step-by-step process.

Stay in Your Lanes

In the early months, one of the most commonly expressed concerns was that the social or technical teams would get into the other's business. In all their other construction projects, the engineers had been left with the responsibility of dealing with any community-related issues—however effectively or ineffectively they might have done so—and thus in PERRP, it was a challenge for them to drop that task and let the social mobilizers do it. Indeed, there were some examples in the early months where a few engineers bypassed social mobilizers to deal directly with the community about an issue. However, without understanding the complex social hierarchies in the communities, they inevitably complicated matters even further. At the same time, some engineers were sure that social mobilizers and community members would try to tell them and the contractors how to do construction. There was a strong, obvious need to delineate the

Table 5.2. Working Together—Stay in Your Lanes.

Social mobilizers, to stay in your lanes, you . . .		**Site engineers, to stay in your lanes, you . . .**	
SHOULD	**SHOULD NOT**	**SHOULD**	**SHOULD NOT**
• look after everything to do with the committee and community • refer any committee issues about the contractor or construction to the site engineer, who will deal with the contractor • ensure that site engineers are invited to community meetings	• try to solve any problem or talk directly to the contractor about anything to do with construction, except in an emergency, and ask the committee and community members to do the same	• look after everything to do with the contractors and construction • refer any issues involving community members to the social mobilizers, who will have the committee deal with them • attend meetings with social mobilizers and the community as much as possible	• try to solve issues directly with community members or ask them to do anything, even if it's the contractor making the complaint (unless it's an emergency) • ask the contractor to discuss any construction-related matters with community members

jobs while also building common understanding and being able to sing the same song in the midst of a very large audience.

While it was often not an easy subject to broach, social mobilizers and engineers were encouraged to have frank but friendly dialogue about how to keep out of each other's business. It was a matter of separating but coordinating the roles. Just as vehicles on the road need separate lanes to avoid crashing into each other, PERRP asked social mobilizers and engineers to learn about each other's roles, but to metaphorically stay in their own lanes. A social mobilizer should not try to direct, or give an opinion on, construction. The engineer should not direct, or give an opinion on, anything relating to the committee or community. They were encouraged to respect each other's professional expertise and take up the new skill of deferring to whoever has more expertise. Delineating the roles thusly was part of the communication protocol, which separated but coordinated the engineers' and social mobilizers' roles.

Year Two to Project Completion: From the Norming Stage to the Performing Stage

By the beginning of the second year, things were running far more smoothly. The social and technical teams, community members, and contractors had caught on to the new ways this construction project was being run. The step-by-step process was being followed, the communication protocol with grievance procedures was used daily, committees were fully functioning, and there was generally good cooperation between committees and contractors. PERRP had completed many of the designs for the first buildings and construction had already started.

There was a turning point in engineers' and social mobilizers' views of each other when both watched the other achieve what at first had seemed unimaginable. Engineers changed their views when they saw social mobilizers leading communities to organize, deal effectively with construction, and do what they had never seen before: quickly settle land issues, freely obtain loans of assets to help construction, and engage in community-wide problem-solving. For social mobilizers, respect for the engineers grew as new buildings started to appear even in the most challenging of construction locations, fulfilling the dreams of the villagers.

In this process, major lessons were learned about meeting each other's goals. While the engineers' goal was to finish high-quality construction as quickly as possible, the social mobilizers' goal was to have the people participate, to ensure their voices were heard in the project, and to build on their capacities. At first these seemed to be competing goals, but with time and effort, the technical and sociocultural sides realized that by helping to meet each other's goals, they were also meeting their own goals.

After months of working together, the counterparts were able to tackle the most ordinary and the most complex situations, as described in anecdotes and ethnographies throughout these chapters.

Factors Supporting Social and Technical Integration

While a disaster reconstruction project has a tangible end goal—which, in comparison to projects with less visible outcomes, may act as a focal point for the efforts of all those involved—a physical end product is no guarantee of a smooth process. Coordinating such a project requires certain management styles and features, such as the following.

Top-Down Management to Get Bottom-Up Participation

In the reconstruction research literature, there is some concurrence that "a very strong commitment and leadership from the top are needed to implement a bottom-up approach, because pressure is strong in an emergency to provide rapid top-down, autocratic solutions" (Jha et al. 2010: 183). People's participation in projects simply will not be thorough, or will not happen at all, unless it is initiated and reinforced from the top. In PERRP's case, the participation was initiated by USAID; this contractual obligation was taken on by the project's senior management team and then passed down to field staff, who implemented the work at the community level.

Making Sociocultural Expertise and Community Participation Part of Senior Management

USAID made the unusual move to specify that the head of the social component was to be part of the four-person senior management team. In projects in sectors such as agriculture, water, forestry, and health that involve community participation, it is more typical for a project to subcontract the community work (for example, to NGOs). However, community work is easily treated as extraneous to the project, and therefore as separate from the "real" work. Putting the social team leader into senior management emphasized the social component's importance and also made it partly responsible for the success of the whole project.

When asked about this decision after the project was completed, Robert MacLeod, former director of the USAID Pakistan Earthquake Reconstruction Office, said, "One of the most important decisions in designing the earthquake reconstruction program was to include an anthropologist familiar with rural Pakistan as one of the key personnel in the construction contract. Reconstruction is not just about bricks and mortar but rebuilding communities and the people who occupy them" (Hagan and Shuaib 2014: 2).

Consistent Message from Top Down

Within the senior management team, the chief of party—the head of the project, who was also the head engineer—and I invested time in developing a common vision, process, and communication procedure. Through an iterative process throughout the project, strong mutual support evolved. In the final workshops to evaluate the project experience, one of the points most commonly reported by engineers, social mobilizers, and others was the consistent message that field staff received from top management: "One of the main reasons the community participation program worked as well as it did was that we (social mobilizers, engineers, designers, and contractors in the field) heard a unified voice from the project's head office. Because the head of the social program and chief of party were consistent and backed each other up, we knew the project was serious about respecting the community and having the people involved."

Counterpart System

From the beginning, the project matched engineers and social mobilizers to work as counterparts: one pair per construction site. Each construction site had a PERRP site engineer, who remained there full-time to supervise the contractor, while the social mobilizer was responsible for the communities at four to five sites. Social team members and engineers were hired at the same time, shared side-by-side office spaces, and had orientation and training together, all of which helped integrate the social and technical work.

Communications and Reporting

While daily meetings and discussions were hosted at the two field offices in the Mansehra and Bagh districts, weekly conference call meetings at the main office in Islamabad were attended by the chief of party and key engineers and social team members, who reported on progress and raised issues to be addressed. Monthly written reports to USAID were compiled to document construction and participation progress. Addressing matters with both the technical and social sides present helped recognize and reinforce their interdependence.

Sample Willingness Resolution

In writing a willingness resolution, community members chose their own wording and wrote it themselves in Urdu. One community's translated willingness resolution read:

> We, the people of Kafalgar and surrounding areas, testify that the social team of PERRP has briefed us about the project, its various components, and about the need for community participation. We have been informed about many responsibilities we will need to take on during the project, and we are willing to accept them and do so by consensus. We invite the project and request that construction proceed. We assure all our cooperation for whatever is needed and thank all those people who are making this new school possible.

Introducing Grievance Procedures

Even talking about conflict could be a delicate matter, but emphasis on prevention was welcomed. At the first large public meeting in each community, the social mobilizer assigned to that site gave a speech as part of the program. Speaking in the local languages and being from the same district and culture, the social mobilizer connected with the audience as an insider. They explained the unusual ways in which the project would work to prevent conflict, and that everyone's participation would be needed in this effort. This was going to be a new experience in these locations. The same message was repeated daily, and complaints were addressed by the committee and the project. The social mobilizer's introductory remarks included a variation on the following appeal:

> You know very well how easy it is for conflict to break out here. We have so many differences, and we know all too well what causes conflict: because people belonging to different political parties, different castes and sects, often don't get along very well. You know all too well how dangerous the conflict is, and how common it is for people to lose their lives and their property over such fighting. That's why PERRP is bringing a new idea here called "grievance procedures." What this means is that we have a way to handle everybody's complaints, so in this project, there will be no need to fight about anything. If you have any complaints, or if anything goes wrong, you should go right away to your committee. If they can't solve the problem, they will bring it to me as your social mobilizer. If the problem involves the contractor or construction, I will take the problem to the site engineer to get a solution."

"How Do You Do It? Be a Catalyst in Dispute Settlement"

A particularly active field officer in the Department of Education was keen to know how PERRP was settling land issues. Invited to attend community

meetings to witness their process, he expressed surprise and wonder, saying, "In only a few hours, you were able to resolve this whole thing, but this would have taken us years in the court. Already we have over 150 court cases pending, mostly on land issues." On behalf of the Department of Education, he and others expressed the wish to replicate the PERRP process, but they also said that the changes that were needed to do it in the bureaucracy would be insurmountable. "In any case, independent projects from outside, like this, can be a catalyst, and can make change which may not be possible for a government because of our history together," he said.

Camel in a Tent School

Despite project supervision of contractors and the agreements made between contractors and committees, contractors still occasionally did not do as agreed.

For months, one local committee had been asking their construction contractor to put a fence around the temporary tent school site to keep out grazing animals and other unwanted visitors; however, the contractor did not do it. One weekend when the school was closed, a camel somehow got into one of the tents and could not get out again. Local people and the contractor tried to lead the camel back out of the tent, but it thrashed around, breaking the pipe to the main water tank. Finally, they were able to get the camel out. Soon after this, the contractor finally put in a fence.

A Deliberately Broken Water Pipe

The kinds of construction problems involving or affecting community members varied widely. Without a participatory process and agreements between the construction project and community, such problems could have had highly negative results for both. Sometimes the underlying cause of a technical problem was a long-standing social problem.

At a critical time when concrete was being mixed and poured for construction, the deliberate breaking of a water pipe that was supplying the construction site threatened the work. The damage to the pipe was done by a village man of one caste as revenge against a man from another caste for something unrelated. Without urgent cooperation, the concrete work would have had to stop, which would have ruined its quality and required a costly fix.

As soon as the site engineer discovered this sabotage, he informed the social mobilizer, who located committee members by cell phone and asked them to solve this immediately so that the concrete, which was already being

poured, would not be damaged. With social mobilizers arriving at the site within the hour, the committee members had already identified the guilty man and called him, the man against whom he sought revenge, and elders of both castes together and condemned this behavior. The members reminded everyone that the community (in the Committee-Contractor Agreement) had agreed to provide water for construction, and that this kind of incident now was a shame on the community. Committee members asked the elders and the two men to settle their differences and the two men apologized. To be sure of no more water trouble, the committee had part of the water pipeline rerouted to land where it would get better protection. The problem was caught in time with no damage to the concrete, and construction was unaffected.

Construction Steel Stolen and Hidden in a Corn Field

Over the total of fifty thousand construction days in the project, only eight—an unusually small number—were lost because of conflict. Two of those eight lost days were over this incident: a misunderstanding about stolen property. A man had rented land to the contractor to dump excavated materials from the collapsed school, but he then withdrew his agreement and ordered the contractor to vacate the land in retaliation for the contractor having accused him of being a thief. Someone had stolen some steel reinforcing rods to be used in construction and hidden them in the man's field of fully grown corn stalks. Accusations and counteraccusations drew in the whole community, the contractor, and the construction workers.

In this uproar, the social mobilizer contacted the committee and the site engineer, and these two brought the man and the contractor together in one place. As the project assigned responsibility for conflict prevention and resolution to the committee, members heard both sides in the dispute. In the end, the two parties agreed that there had been a misunderstanding. They apologized to each other and made a new agreement about the land.

Fight Over the Road Being Blocked

Despite thorough preparation, agreements with communities, and public discussions on how to make and respond to complaints in order to prevent conflict and violence, it took about one year in each community for their agreed approaches to work. Conflict still sometimes happened, but the shared responsibility of PERRP and the committee served to resolve such problems.

As construction was about to start at one site, two local men had beat up the contractor's site inspector for unloading steel rods beside the road, partly blocking it. This was a situation that could have rapidly escalated into a wider fight between laborers and community members, which would have caused much loss, but it was resolved in only a few hours.

As soon as it happened, the contractor reported the incident to the police, but then, according to the communication protocol and the Committee-Contractor Agreement, he also contacted the PERRP engineer, who asked the social team to take action. As it was local men who had resorted to violence, and as the committee had promised to prevent or solve conflict, the social mobilizer went to the committee and asked the members to settle the dispute. They called an emergency meeting of the community, had the two local men apologize to the man they had assaulted, and issued a stern warning to the community: if anyone caused any more trouble, the committee would make them pay a huge fine of fifty thousand Pakistani rupees (roughly $550, about five times the monthly salary of a local teacher). Construction was not hindered.

"We Never Hear Complaints about this Project"

A government official, who was frequently in contact with the project, repeated this observation several times: "We are constantly contacted by community members about problems with construction on other projects, but we had never had a single complaint about the PERRP project." He wanted to know more about how PERRP worked with the communities. Committee members and social mobilizers explained to him how the project handled grievances inside the project:

> We try to make sure everybody in the community knows that, if they have any problems or any complaints at all regarding the construction, the contractor, or anything related to the site, they need to take that complaint right away to their committee—not the contractor. The committee, social mobilizer, and site engineer act quickly and reach a solution so people don't get upset and take action themselves. That's probably why you don't hear complaints. They are taken care of inside the project.

Two Views—Listening to the People

Looking back on the project's early months, a social mobilizer remembered:

> When we were first getting the project started, the engineers thought they knew everything needed and that they were superior. Some of

them looked down on us social mobilizers and on community involvement and even resented it. They didn't think that the local people were important at all. One of the engineers said to me, "We [engineers] already know how to do what's needed. We don't need a social program and we don't need the community. They will just waste our time and cause trouble." A few weeks later, when a big problem cropped up over a land issue at one of the schools, the same engineer phoned me to come urgently to the site and solve the problem. I reminded him, "But you said you know how to do everything"—he pleaded with me, however, so I went to the site, sat down with the community members, and in a couple of hours we solved the issue. After this kind of thing happened a few times, where the engineers heard the disputes, our negotiations, and the solutions we reached, it was a different tune. Their attitudes changed completely. They soon realized it was far more complicated in the communities than they had thought, and that it really does take special expertise to deal with it. They also got to see it was in their own benefit, too, to listen to the people.

Rough First Year

Near the end of the project, when looking back over their experience, a senior engineer said to a member of the social team, "Wow, things were pretty rough in the first year of the project. You social mobilizers were so stressed all the time trying to make things work." The social mobilizer replied, "That's because it took that much time for you [engineering] guys to listen to us!"

"Look Who Is in the Graveyard! Ha, Ha, Ha!"

Outside PERRP's compound walls in Bagh district, there was a local family's private graveyard, which had its tombstones clearly visible from the compound's entry gate. Sometimes an engineer, when bringing in visitors, would point to the graves and say, "See what we do with social mobilizers!" The joke reflected the rocky early relationship between project engineers and social mobilizers. If a social mobilizer was arriving with guests, they would also indicate the graves and say, "See what happens to engineers in this project?" While done in good fun, it should come as no surprise that the social and technical specialists at times had trouble getting along with one another, especially in the early months of the project. By the time they were able to joke about it like this, they had gained a deeper understanding of each other

and their roles. It took time and effort for sociocultural and technical specialists to work together effectively, but after some time, they could draw on a shared sense of humor and joke about their differences.

Engineers Say, "Having a Social Team Saves a Lot of Time and Trouble"

Near the end of PERRP, windup exercises and discussions were held with engineers and social mobilizers to analyze their experience. Although highly experienced in other construction projects in the region, engineers reported that none of those projects had had a dedicated social team. When asked to compare and contrast community-related problem-solving in those other projects and in PERRP, there were a variety of answers, such as:

> In other projects I've worked in over the years, when there was a fight, we would just stop the work and go to the owner or client, but they often couldn't or wouldn't do anything about it, or it would take a long time. Sometimes the contractor would try to bargain with people, or pay them something to settle. When work got stopped, it meant a lot of time was lost and it multiplied the problems of the contractors too (site engineer, Mansehra).
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> I watched PERRP social mobilizers working with the people and now I understand how complicated all that social stuff is. At first, I thought having a social team was not necessary, that it would just slow us down when all we wanted to do was get on with the job, but that turned out to not be true at all. Until I saw the social mobilizers doing what they do with communities, I had not realized how much skill that takes—and I don't have that skill. I changed my mind about how to deal with local people when I saw how they worked with the community and got the problems solved (site engineer, Bagh).
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> When PERRP is finished and I will need to find a job on another construction project, I dread it, as other projects do not have social teams and that means somebody—probably me—will get stuck trying to solve these problems. I don't have the patience for it. And anyway, it means I have to run around doing that when I am supposed to be looking after all the details in the construction. Having a social team saves so much time and trouble (resident engineer, Bagh).