Enabling Framework

This framework helps enable its user to restore the health of his or her community. A community first uses a set of considerations to assess their existing and future needs and resources. They can then decide on programs and technologies that best satisfy projected needs and overlap to maximize benefit from available resources. The approach allows a community to implement programs with an understanding of how they will adapt and interact over time.

community-based framework +
assessing needs and resources +
generating solutions +
implementing over time +

Sustainable development and rebuilding efforts are most successful when they are deeply rooted in the community. A top-down rebuilding approach fails to recognize the resources that people have at their disposal, including their traditional practices and skills. Projects that include true participation from community members are most likely to be culturally appropriate, effective in the long term and take full advantage of local knowledge and resources.

Guiding Principles:
• Recognize the community as the expert
• Overlap uses and functions over time/space
• Recycle system inputs as many times as possible
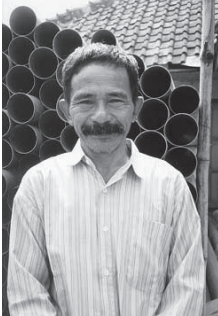• Maintain a long-term vision

Framework for Communtiy Rebuilding by Identifying and Connecting Needs and Resources

Improving community well-being is the central goal of the rebuilding process. Disaster relief can provide for immediate needs, but long-term well-being depends on a more holistic approach that looks at many different aspects of people's lives.

The 'livelihoods' model (used by many international community development agencies) helps make it easier to understand the multiple factors that influence people's ability to support themselves and their families. This model describes five categories of resources - *natural, physical, social, human and financial* - that combine to form a livelihood. Strong, healthy livelihoods draw from each of the five categories and make it easier for people to recover from traumas like natural disasters.

financial — physical — community well-being — natural — social — human
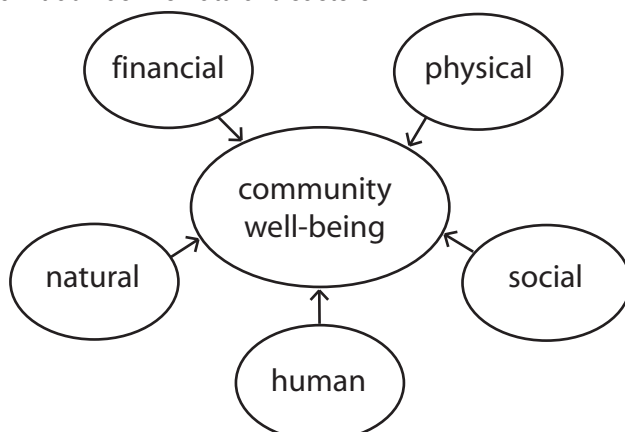
The best response to disasters meets immediate needs without compromising long-term well-being. Creative, innovative solutions are generated by recognizing connections between seemingly separate needs like food, water and shelter. The goal of this framework is to make it easier for people to see the connections between different parts of their lives so they can best take advantage of their resources and plan for the future.

resource	description
natural	the natural resources that are available in a given context: land, forests, marine/wild resources, water, protection from storms and erosion
physical	the basic infrastructure and tools needed to support livelihoods: affordable transport, secure shelter, adequate water supplies and sanitation, access to information
social	the social and cultural resources that foster mutual support in communities: networks and connections, memberships of groups, relationships of trust
human	an individual's capacity to work: knowledge, skills, physical ability to labor, good health
financial	monetary inputs and means: small scale loans, monetary relief aid

financial

human

social

physical

natural

Enabling Framework

How to Apply the Framework

Assess → Select → Implement → Reassess

The following exmple shows how a community might go through the four steps of this framework . The example is simplified to illustrate the process, but ideally the approach should simultaneously address all the needs and resources of the community.

Assess → Select → Implement → Reassess

The first step in community rebuilding is to assess a community's needs and resources, both immediate and long-term. Communities can ask themselves simple questions to help clarify what they already have and what they need. Some example questions include:

Q: What do we need most right now?
Q: What tools and resources are immediately available?
Q: How can we apply our skills to meet current needs?
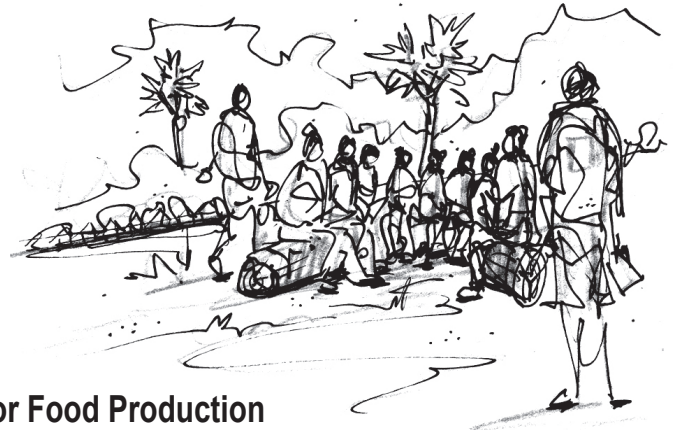
Example: Assessing a Community's Capacity for Food Production

Q:What are the community's most immediate needs?

A: We need better shelter to protect us from the rain. We have tents from the aid agency but they won't hold up long under monsoon conditions. We need a steady supply of food and pots and fuel to cook it. We've been getting food aid delivered, but we're worried about what we'll eat when the deliveries stop.

needs →
- shelter
- food
- fuel
- cooking utensils

existing resources →
- aid supplies
- fuel from debris

Q: How did you support yourselves before? Where did your food come from?

A: We grew some food in the gardens near our homes and in a community garden, but these have been damaged by debris and saltwater. The camp where we have been moved is far from our homes, so we can't get to the gardens to salvage what might be left or plant new crops for the next season.

needs →
- transportation

existing resources →
- existing gardens
- salvaged food
- knowledge

Q: What about the gardens? What would you need to start replanting?

A: We need land first. Our situation right now is so temporary that we don't know if we'll even be here to harvest what we plant. To plant a new garden we would need to find a place with decent soil that hasn't been damaged by the tsunami. We would also need seeds or plants to start a new garden and tools to work the land.

needs →
- land for gardens
- soil rehabilitation
- seeds
- plants
- tools

existing resources →
- seeds
- plants

financial

human

social

physical

natural

Assess → (Select) → Implement → Reassess

Once the community has identified needs and resources, it can prioritize them and select programs and technologies that fit its situation. The projects generated by this studio and the toolkit on our website offer adaptable solutions that may inspire new ideas that will work for the community. The goal of this approach is to generate innovative, context-appropriate solutions. The following shows the selection of existing technologies that could be applied and adapted to a particular situation.

Toolkit: Selecting Technologies for Community Food Production

natural
agroforestry, soil desalinization, community gardens, coral reef rejuvenation, home gardens, composting, natural disaster buffers, seed banks, plant nurseries

social
community centers, community gardens, religion, rituals and festivals, community meeting spaces, traditions, family planning

human
training programs, schools, crafts and trades, expertise, physical and mental health, access to information, libraries

physical
training facilities, water treatment, water collection, waste management, transportation, tools, materials, energy, shelter, shared facilities

financial
savings, lending programs, tourism, outside aid, export of goods and services, co-ops

living machine
Beneficial bacteria remove harmful pathogens from wastewater making it a valuable source of plant fertilizer

community waste facilities

aeration + settling barrels

constructed wetland

agricultural fertilizer
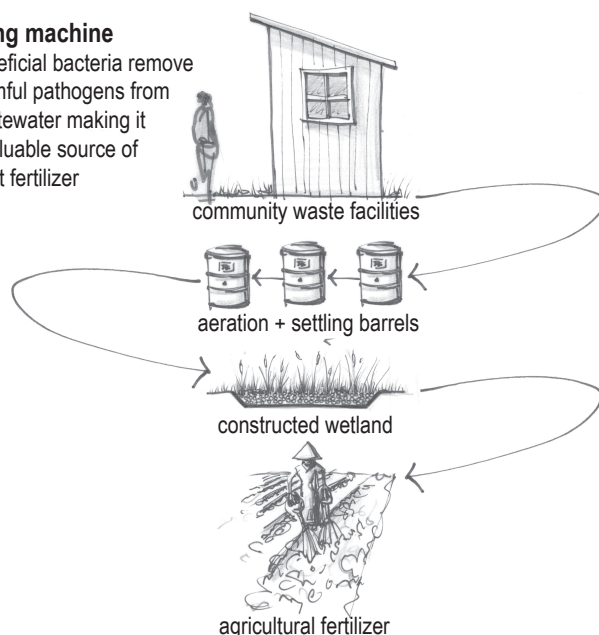
Example Technologies

temporary gardens
Temporary gardens can be planted to supplement or replace the food aid that is delivered to displaced or temporarily housed communities. These gardens could help to establish a sense of ownership and permanence, as well as supply food.

seed collection
Seeds from local sources can be scavenged and collected to preserve the native plant genome, producing plants that are adapted to the existing environmental conditions.

soil rehabilitation
Different methods of soil desalinization could be employed at an early stage to prepare the land for future gardening and agriculture.

seed banks
To continue the stock of indiginous plant sources seed banks can be established from the yeilds of harvests and/or collected from local sources . These seeds can assist the economic self-sufficiency of the village and can be traded with neighboring communities.

composting
Organic debris left by the tsunami can be composted to feed the temporary gardens. Later, the waste from these gardens could be composted and used in the community garden, helping to further remediate the soil.

sustainable garden center
Training programs could be impelemented to encourage sustainable gardening practices. Tools, seeds and equipment could be loaned to help individuals in a community establish their gardens.

water collection
Collecting water from rooftops and other impervious surfaces could help to preserve this limited resource. Water that is used for washing or cooking could also be reused to water food gardens.

financial

human

social

physical

natural

Enabling Framework

Assess → Select → (**Implement**) → Reassess

Selected programs and technologies are implemented and adapted over the long term.

Assess → Select → Implement → (**Reassess**)

After the first set of solutions has been put into action these steps are repeated to evaluate their level of success and inform new ideas that continue to improve the community's well-being.

financial

Example: Implementing Community Food Production Over Time

The line of pictures below shows how some of the food-related technologies, selected from the toolkit in step two, relate to each other over time. The more complex flow chart gives an idea of how they relate to different needs such as shelter and economic self-sufficiency. This gives an indication of how a community might best use resources to meet many of its needs over the long term.

human

seed collection → seed bank → compost → training center → garden

Example: Exploring Complex Connections Over Time

social

economy → collect + sort debris → community builders yard → training programs → establish market space

small-scale loans → start home-based business → start community co-operative → exports

food → aid delivered seeds + plants → seed bank → compost sorted debris → rehabilitate agricultural lands → sustainable agro-forestry

aid delivered food → collect local seeds + plants → plant temporary gardens → compost → plant permanent gardens at re-established settlement

sustainable garden center + program → plant renewable building materials

shelter → tents → build shared cooking + waste facilities → build core house with debris panel infill → add kitchen + bathroom → build porch → enclose porch → replace debris panels

aid delivered building materials

physical

natural