

Patterns for Sustainable Development

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Linda's Story

I recently visited a college's campus bookstore. As I headed down one aisle, a large copy of *Diffusion of Innovation* by E.M. Rogers caught my eye—"strange," I thought, because I was in the agriculture section. Mary Lynn Manns and I heavily reference this publication in our book, *Fearless Change*, because Rogers introduces a model that segments a "normal" population, based on its response to innovation, into the following categories: Innovators, Early Adopters, Early Majority, Late Majority, and Laggards. I was intrigued by the accompanying text for the course, a small paperback called *Two Ears of Corn* by Roland Bunch. The title is from Jonathan Swift's *Gulliver's Travels*:

Whoever could make two ears of corn, or two blades of grass, to grow upon a spot of ground where only one grew before, would deserve better of mankind, and do more essential service to his country than the whole race of politicians put together.

As I leafed through the book, subtitled "A Guide to People-Centered Agricultural Improvement," I was surprised to see that it described many of the same patterns documented in *Fearless Change*. This wasn't a book of patterns, however. It was for a course titled, "The Diffusion and Adoption of Agricultural Innovations." The course description read:

Factors that influence rates of diffusion and adoption of innovations. Consequences of adopting or rejecting innovations. Processes by which change agents influence introduction and adoption of innovations.

I bought the book, but, as a "pattern junkie," I kept tripping over contexts, forces, problems, and solutions. I couldn't help but think that the book would have been even more useful, easier to understand and implement, if it had been cast as a collection of patterns. I was especially moved by the following:

The introduction of innovations into Third World agriculture has met with everything from disaster to exhilarating success. Well bred animals have often died of disease and malnutrition. Home

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and school vegetable gardens have yielded disappointing results in many projects in India and nearly everywhere they have been tried in Latin America. Yet poor goatherds in a remote program area in the Bolivian Andes have walked for fourteen hours to buy animal vaccines, and Indian farmers involved in a program in Guatemala are producing, with their own native varieties, up to 3,200 kilos per hectare of dry beans, twice the average yield in the United States. Some innovations increase the production of thousands of farmers while others fail to be accepted by even a handful. If we are going to work with only a few innovations, how can we choose the ones that will find the widest acceptance? World Neighbors' experience indicates that there are a number of widely applicable criteria that can guide us in choosing the appropriate technology for any particular area.

"Widely applicable criteria"—patterns! I was so excited by this book and the idea that the patterns in *Fearless Change* might help a large part of the population outside the original target audience.

Two Ears of Corn, with its stories, simple drawings, and appealing message, helps Third World farmers improve their lives. When I first thought of rewriting *Two Ears of Corn* as a book of patterns, my goal was to give something to a "cause." However, as I read and re-read the book and began to see the patterns in Bunch's words, I found nuggets of wisdom that don't translate to the patterns in *Fearless Change*. In other words, I'm receiving as much from my translating work as I had hoped to give. *Two Ears of Corn* has helped me as Mary Lynn and I continue to work on expanding and improving our patterns. When, for example, one of us stumbles across a new pattern that we're not sure we captured, the clear and compelling stories of agricultural innovation in small villages enable me to think more clearly about context, forces, problem, and solution.

1. INTRODUCTION

I'm enlisting the help of a co-author, my husband, Karl Rehmer. He has promised to help me grow this pattern language. We are looking beyond World Neighbors to other successful non-profit organizations. The patterns in this paper are just the start of what should become a much larger collection making up a pattern language. Therefore, as you read them, you will likely think of a number of related patterns that should be written. In writing these and researching the area, we certainly have come across many ideas for other patterns, in fact, in this paper we may use a pattern name, hopefully with obvious meaning, that we have not yet

written. We would appreciate any feedback or ideas for additional patterns that you may have.

We regard the patterns in this paper as “middle-level” solutions. We have started here because we find a lot of evidence across a number of organizations that they work. What we don’t yet know is what the “starting” patterns are. We need to get closer and spend more time with development organizations to learn what those are all about.

Sustainable development should not be confused with aid or relief. Aid is important in areas of extreme poverty or where a disaster has occurred. Aid brings immediate relief and allows for short-term survival of the recipients. Sometimes this is enough to allow the recipients to get back on their feet and return to normal. The goal of aid is not to provide a long-term solution.

Sustainable development seeks to encourage recipients to make permanent change to better their lives. A consequence of being sustainable is that the circumstances of the recipients are permanently changed. Permanent change is cultural change. Therefore, these patterns are patterns of cultural change. It is important to realize, however, that the goal is not to change a culture into something that duplicates the culture of the helping organization. The goal is to empower recipients to evolve their culture in a direction they choose.

It is easy to read some patterns, for example **Empowering Women**, as an attempt to change a culture because it is “the right thing to do.” We tend to think that we can make things better by cloning our values and imposing our ideas of morality. This would be a misinterpretation of the intent of these patterns. Our goal is to document things that work.

The target user of these patterns is part of an organization that provides development assistance for communities in need. Members of these communities themselves can also benefit from understanding the patterns. We often think of these communities as being part of the Third World, but they could easily be found anywhere, even in the United States.

The patterns in this collection: *Passing on the Gift*, *Small Support Group*, and *Empowering Women* follow the same variation of Alexander’s format used in *Fearless Change*.

Each pattern includes:

Name in bold

Alias (if applicable)

Opening Story in italics that conveys the essence of the pattern

Abstract in bold

Context

Problem statement in bold

Description of the Problem and Forces

“Therefore” in italics

Essence of the Solution in bold

Elaboration of the Solution

Resulting Context

Known Uses in italics

Names of patterns referenced outside the pattern heading are in a different font.

2. PASSING ON THE GIFT

*Fourteen women who'd earned income from their goats would now pass on the offspring to newer members. The donors wore red saris; the new initiates wore lavender. The whole village had turned out. I felt hope rise, and soon was crying like a child, because Dhana Bishow-Karma, whose old untouchable hand I'd wanted to hold, was now standing, throwing her shadow over everyone, holding her gift: a lop-eared goat wearing a necklace of marigolds. She walked toward her chosen recipient, another poor widow belonging to the highest caste in the village. Last year Bishow-Karma couldn't have entered the woman's home. Today she gave her good fortune. In the embrace of two old women holding each other, I saw the architecture of human grace. How astonishingly simple: mental poverty ends this way. A person's status can change, not by receiving but by giving. (Barbara Kingsolver, *World Ark*, May/June 2009)*

To ensure that development efforts live on after the donor organization departs, set up a system whereby recipients of a gift make a commitment to give a similar gift to others.

Someone needs help and is a member of a community of others with similar problems, or perhaps there are near-by communities with similar problems. The problems are not so desperate that people need immediate relief. The people want development support not a hand-out. You are focusing on helping individuals who might be part of a *Small Support Group*, but want to make sure that more will receive assistance over time *Evolving Change*.

Our well-intentioned actions for development can die a short time after we depart. How can we ensure that the local community continues the effort?

We often view the problems of others as a puzzle that requires our best efforts to resolve. We want to get our hands on it and straighten out the crooked parts and make everything right. Then we can feel satisfied and go on to the next problem. It’s hard for us as outsiders to accept that we might not know what’s best for the local community. We are reluctant to listen and slow to learn that the locals know more about their problems better than we do.

Receiving an outright donation of training or food or cash or technology leads to expecting more aid. When organizations leave, their good works can die because nothing has been learned except that there are outsiders who are willing to help. What this

teaches the recipient is that waiting for aid may lead to more assistance and so a vicious feedback cycle of dependency results.

In the face of all the problems in the world, you know that your bank account is limited and is always inadequate to address the problems you see. You can raise all the money you can possibly raise and it will never be enough. The need is boundless.

Therefore:

Ensure that each recipient of a gift agrees to give gifts to others, where the gift is not a simple hand-out but a means to enable the recipient to help himself.

As the old saying goes: Give a man a fish and you'll feed him for a day. Teach a man to fish and you'll feed him for a lifetime. The gift is a help-up not a hand-out.

The gift is also not just a job or some isolated course of training, although these can be part of the gift, in fact, the gift must include any training that will result in the recipient's being able to effectively use the actual gift.

The goal of a sustainable development is to empower the people to solve their own problems. We often believe that what we can do is to solve the problems that we see as outsiders. This is often the goal of training programs. Yes, you want to improve the knowledge of animal husbandry and other topics of interest, but you also want to increase sustainability, the largest part of which is passing on the gift.

The responsibility for determining the gift and the next recipient is not the job of outsiders but belongs to the members of the local community. They know the local needs and those who need help better than the outside organization.

Many cultures and religions have a deep notion of sharing and caring, although in some cultures this may only be practiced within the family.

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Using this pattern makes it more likely that the well-intended actions live on. Recipients will own the process and can begin to take control of their lives. This practice is larger than the simple handing off of an equivalent animal or amount of money. This is an operational directive that people who live well follow in their own lives. We are continually giving to others in response to what we feel we have received. Those who practice this say that the more they give the more they are enriched. **Passing on the Gift** is a metaphor for a rewarding life.

By having individuals pass on the gift, the changes that result from the assistance are at first small, but grow to involve more and more recipients as the gifts are passed on. The cultural change that is a consequence of the assistance occurs gradually and so is less likely to meet resistance than an influx of large sums of money for aid.

However, there can be a tendency to be heavy-handed in this process and play the role of overseer. The people must themselves be responsible and take ownership of the ritual and their lives.

Care must be taken to make sure that the original gifts are appropriate for the environment and culture of the recipient **The Right Gift**.

In the 1930s, Dan West, an Indiana farmer doing relief work in Spain began to ask why he was handing out powdered milk to refugees. With the observation that it would be more effective to give "a cow, not a cup," Heifer International started more than 60 years of work providing livestock to impoverished people. The cornerstone of Heifer's work is "Passing on the Gift," which means that recipients agree to share the offspring of animals they received from Heifer by giving to others in need. The impact of this ritual is the heartbeat, the lifeblood of the organization today.

Habitat for Humanity is an international non-profit organization devoted to building "simple, decent, and affordable" housing. Homes are built using volunteer labor and are sold at no profit. This policy has been in place since 1986. Homeowners are usually expected to put in "sweat equity" into their own and other project homes. When the homeowner helps to build another home, he not only helps out another individual, but increases his own sense of worth and a feeling of community belonging.

Each participant, within the NFU New Farm Project, who receives a gift of livestock, seed, orchard tree seedlings, hand tools, or training, signs a contract to pass on a similar gift to another farmer. This encourages community members to support each other in an ever-expanding circle of giving. Sharing best practices, individual successes and research with others benefits all. This is the basis of community: sharing and caring. www.newfarmproject.ca/passing-on-the-gift

The ability of each member of A.A. (Alcoholics Anonymous) to identify himself with and bring recovery to the newcomer is a gift. Passing on this gift to others is our one aim. (Alcoholics Anonymous – Tradition Five from Twelve Steps and Twelve Traditions)

3. SMALL SUPPORT GROUP

The Grameen Bank Project was started in Bangladesh in 1976. It is owned by the poor borrowers of the bank, mostly women. No one who borrows from Grameen Bank stands alone. Each belongs to a self-made group of five friends, no two of whom may be closely related. When one of the five friends wants to take out a

loan, she needs approval from the other four. Although each borrower is responsible for her own loan, the group functions as a small social network that provides encouragement, psychological support, and at times practical assistance in bearing the unfamiliar burden of debt and steering the individual through the unfamiliar world of business.

Individuals who receive assistance need support to ensure that they are able to sustain change in their lives.

Members of a community are about to receive help. They are willing to participate in *Passing on the Gift*.

After a development organization has moved on, the individuals receiving support will encounter problems, but will have no place to go for help.

Organizations that provide aid create dependency as a side effect and become indispensable to those they help. In some cases, recipients may lack the desire to solve their problems feeling that they will lose their assistance.

Leaving individuals on their own does not provide the resiliency to allow them to overcome obstacles that always seem to arise. Without this ability, the assistance becomes a temporary fix that soon fades.

Therefore:

Structure those receiving assistance into small groups where ideas can be exchanged. The members of this small group will provide support for each other.

The goal of successful development is to empower people to solve their own problems. Since individuals in developing communities often do not have the experience needed to be independent, a group of similar others provides an opportunity to learn together and support each other's learning. The collective knowledge is greater than the sum of its parts. Sometimes a member of the support group can lend concrete assistance to someone else. Just being able to share problems and get sympathetic responses can improve an individual's ability to make progress.

In her book *It Takes a Village*, Hillary Rodham Clinton says, "I'm obviously not talking just about or even primarily about geographical villages any longer, but about the network of relationships and values that do connect us and binds us together."

"We must remember that one determined person can make a significant difference, and that a small group of determined people can change the course of history" (Sonia Johnson, American feminist activist and writer.)

The community-oriented dynamic of Grameen is an important reason for the success of the system. The positive social pressure created by the group does a lot to encourage borrowers to remain faithful to their commitments. When Grameen members are surveyed about why they repay their loans, the most common answer is, "Because I would feel terrible to let down the other members of my group."¹

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Using this pattern helps to build a community, and in many cases creates positive cultural change by encouraging interactions among members from different sectors of the society.

Individuals form a community. Building community extends individual's feelings of responsibility to a larger group beyond the family. If the group can be comprised of individuals from different sectors of the society, then this will tend to open more general communication.

However, in some cultures it may be difficult to form a diverse group. The culture of a region may discourage interactions among certain groups so an important part of creating a support group may be overcoming these taboos. The opening story for *Passing on the Gift* shows that it is possible for a group to overcome even the barriers of the caste system in India.

Some critics worry that this requirement seems coercive. As long as no one is ever forced to join and if the only agenda item is to help poor people lift themselves out of poverty, it seems appropriate to recognize the support group as an example of the power of community to encourage people to achieve things they might otherwise find impossible.

Heifer works with groups to identify their own strengths, to connect to a common vision, and to organize a budget that helps implement their plans. Support is tailored to each project. All groups commit to a participatory process which gives all members a voice in all decisions.

<http://heiferportland.blogspot.com/2009/06/heifer-in-united-states.html>

I was in Zacapu, Michoacan, Mexico in the summer of '64. Our project was to begin the construction of a community center in a small slum near the city. It was very poor with just a couple of dirt streets. The only water was from a central tank. A middle class guy helped us get and transport cement for the foundation. The men of the village broke up big rocks into small rocks to make the walls. We didn't really do a lot about formal organization with the locals, but an interesting thing happened over the following winter. Something stalled the work on the community center. The men of the village got together and decided that it was a bummer that the streets were muddy. They realized that what they had for

¹ *Creating a World without Poverty*, Muhammad Yunus with Karl Weber, Perseus Books, 2007.

resources was time and (big) rocks, so they spent the winter making small rocks from big ones and paved their own streets. What we contributed was our example that “something could be done,” and that made them look at the muddy streets differently. Joe Bergin

Banco Mariposa, a student-run organization, will give micro-loans to low-income female entrepreneurs in the city of Valparaíso, Chile. It also creates a unique system of repayment, in which group members are responsible not only to the lender, but also to each other. If a group member is unable to make a loan payment, the group will make up the difference for that week. These communities of women support and encourage each other through the process, while developing leadership, building teamwork, and maintaining accountability.

4. EMPOWERING WOMEN

In 1999, a Bangladeshi organization, Prokaushali Sangsad Limited (PSL), headed by women engineers, decided to bring rural women from a remote location into the mainstream energy arena. They turned the tables making the women energy service providers as opposed to users. Thirty-five women on the isolated island of Char Montaz were organized into a cooperative. They discovered they could make a huge difference in their community by going into business. Ignoring criticism that they were breaking society's rules by working outside the home, they started the Women's DC Lamp Enterprise with funding from the World Bank. The women built battery-powered direct current lamps to replace kerosene lanterns widely used in local homes—a known source of indoor air pollution. As they mastered lamp construction, they also learned about quality control, business development, and marketing. Soon, their critics were their customers. Within two years, they were bringing low-cost light and clean power to over 1,200 households, shops, and boats, and 300 businesses. Shops stayed open longer, children spent more time on school work at home, and incomes increased by 30 percent.

Focus on women recipients for development to ensure that the impact lives on through the women's children.

Women and girls suffer disproportionately from the burden of extreme poverty. Your development organization wants to address these issues as well as the other obvious problems. Members of the community are cognizant of the benefits of Passing on the Gift and have begun to form Small Support Groups.

In many cultures, the role of women has been marginalized. Even when development aid is given, women are not the primary recipients, men are.

The historic approach to development support allocation is not effective. What can be done to improve the impact?

Muhammad Yunus won the Nobel Peace Prize in 2006 for his work with the Grameen Bank and the microcredit innovation. He found that giving credit to poor women brings more benefits to a family than giving it to men. It was Grameen's experience that

when men make money, they tend to spend it on themselves, but when women make money, they bring benefits to the whole family, particularly the children. For Grameen, lending to women created a cascading effect that brought social benefits as well as economic benefits to the whole family and ultimately to the entire community. Their conclusion is that if poverty is to be reduced or eliminated, the next generation must be the focus. This next generation is reached through the women, the mothers in the family, not for emotional reasons, but because it makes economic sense.²

Women make up 70 percent of the 1 billion people living on less than a dollar a day. They work two-thirds of the world's working hours, produce half of the world's food, yet earn only 10 percent of the world's income and own less than 1 percent of the world's property. In some cultures women are not full members of society but may even be treated as sub-human.

It might be that women see problems differently than men as they have to deal directly with issues that arise because of lack of food or illnesses in children.

Therefore:

Turn your attention to women recipients, not to the exclusion of men, but to encourage an equal share in decision-making, labor, and benefits.

The goal of successful development organizations is to empower the local people to solve their own problems. Many of the problems arise because women, who are the primary nurturers in a family, have no control over the use of the limited family resources. By emphasizing women as recipients of assistance, you will directly benefit other family members. Women tend to have a greater focus on the well-being of the children and therefore have a more long range view.

Women have become the focus of many microcredit institutions and agencies worldwide, because loans to women are more likely to benefit the whole family than do loans to men. Giving women control and responsibility for small loans raises their socio-economic status, which has a positive impact on many of the gender and class relationships.

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Using this pattern helps target the recipients who will make the most lasting change. Not only will the lives of women be improved but also the lives of their children.

² *Creating a World without Poverty*, Muhammad Yunus with Karl Weber, Perseus Books, 2007.

However, care must be taken to not overburden the women. We have all heard of the problem of the “supermom” who tries to do too much and fails to balance the needs of a career and family. In “Expanding women’s opportunities: the potential of heifer projects in sub-Saharan Africa” (F.M. Ssewamala in *Development in Practice*) says, “Of special concern, however, is the issue of increased workload, which may eventually adversely affect the health of women and constrain their participation in community meetings.”

When speaking of change brought about by helping women, Darcy Kiefel Gyatri Adhikari, a member of a Heifer women’s group in the village of Astam, says, “Before the formation of our group, men used to believe women could do nothing but today, the men have progressed as well and are treating us equally. They have started appreciating our work along with supporting the poorer members and lower caste.”

A summary of microlending practices by ACCION reports, “Loans to women more often benefit the whole family than loans to men. Giving women the control and the responsibility of small loans raises their socio-economic status, which positively impacts the relationships of gender and class.”

Heifer International says, “By focusing on women we also help struggling families and communities. Overlooked by government

programs and often denied education, rural women face a cycle of poverty, hunger, and despair. Without help, many toil endlessly yet watch, helpless, as death, too often, steals their children.”

Women for Women International began its Microcredit Lending Program in Afghanistan in July 2004 with an initial investment of \$34,210, and is the only organization in the country that offers loans exclusively to women. As of November 2006, \$2.7 million in loans had been dispersed to more than 7,500 women, with a total of \$4.2 million projected over the next five years. The current repayment rate is 100 percent. The Microcredit Program provides vital income-generation support to some of the most socially excluded women in Afghanistan. <http://www.womenforwomen.org>.

5. ACKNOWLEDGMENTS

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