

Sustainable Development Movement: Collective Learning to Achieve Right for Water in City of Surabaya, Indonesia

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Abstract:

During the decentralization policy in Indonesia, good governance has been emerging as a central issue for adaptive eco-management, particularly in order to fulfill the basic right on clean water. The problem, however, is that poor who need to become active actors in their development to enable them get the basic right are often beyond easy reach. These peculiarities or differences render the task of involving poor people in the planning and implementation of development efforts difficult. In line with the design of decentralization which is faulty in the first place with full of legal contradictions and ambiguities, the participatory process has descended into an arena for predatory politics. If that so, the research will take advantage of the possibility of a critical perspective afforded by the community development perspective at helping communities achieve the basic right of clean water as poverty reduction strategies in the shaping of specific developmental intervention by donor, to examine the sustainable development. More over, the objectives of this research go beyond reporting on the degree of success of the efforts at mainstreaming community development concerns in the sustainable development, though it draws upon many such reports. In particular, a primary role is played by processes of “collective learning” which result in a “socialized” growth of knowledge and embedded not only in the internal culture of local community but, particularly, for the international development agencies. Pilot testing the use of the methodology for participatory assessment in City of Surabaya is designed to promote specific measures of design and implementation that take better account of participation, community demand, gender, and poverty perspectives.

Keywords: community development, the basic right of clean water, and poverty reduction strategies

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INTRODUCTION

A route from social movements to policy is potentially of great importance. The contentious nature of social movements complicates any reflection on policy, because much of the strength and potential contributions of social movements to governing social-ecological change come from their oppositional nature and their willingness to engage in contentious politics. The movement becomes policy maker, a process that can be fraught with tensions both within government as well as in its relationships with other sectors of society. For external actors, however, such governments can become the object of policy. The temptation for elites and governments to weaken, delegitimize, incorporate or indeed repress social movements is always high. (Bebbington, 2006).

Along with the idea that learning involves a deepening process of participation in a community of practice, the paper argues for a more critical understanding of the role of community learning in environment social movement by referring to a case in Kampong Rungkut Lor from the experience of Surabaya City, Indonesia. Parting from this observation, the paper reviews the role of social movement in fulfilling basic need of clean water for the poor. It focuses on two main domains in which such movement might influence sustainable development movement within long term policies. First, it discusses their roles in challenging the social structures for community learning that underlie social ecological movement. In this domain, movements can play potential roles in changing condition under which accumulation occurs and attacking relationship of local leaders. The influence of local leader is not just in the different abilities of classes to mobilize political resources, but also in the construction of environmental discourse itself. Second, movements have played important roles in the cultural politics regarding social ecological government. They have helped change dominant meaning associated with the poor, and influenced the way of social ecological government in which the poor are thought in society.

The community-based approach to governing social-ecological change is a model of inquiry rooted in Freire's participatory action research (PAR). We need to show, in concept and practice, what it is about PAR that may be well suited for the types of health issues we encounter in inner-city environments. What type of learning results, how does this respond to particular health issues in the urban context, and what are the particular challenges faced in translating Freire's model into social-ecological change within today's urban setting? To investigate these questions, we describe a recent PAR project in Rungkut Lor, Surabaya. There are challenges to translating the model to the urban setting, however, such as the difficulties of participation in community. The research leads to some lessons for practitioners, such as the need to build "constant" elements into PAR projects. Lastly, we reflect on implications of this model for institutional reform.

The paper report is divided into three main sections. The first section reviews historic debates on social movements. The second section then discusses the need of movement along with environmental knowledge and social movements with the aim of illustrating that environmentalism in developing countries may not be based upon the representation

of 'local' environmental values and knowledge. The third section discuss about the initiative of grass root movement.

Lifelong learning is the concept that "It's never too soon or too late for learning" which throws the axiom "You can't teach an old dog new tricks" out the door. Lifelong learning sees citizens provided with learning opportunities at all ages and in numerous contexts: at work, at home and through leisure activities, not just through formal channels such as school and higher education (Field, 2006). Community development programs in Kampong Rungkut Lor has similar goals, with the concept of lifelong learning used by organizations to promote a more dynamic employee base, better able to react in an agile manner to a rapidly changing climate. For becoming or sustaining a learning community, local leader has the task to make the best possible use of the knowledge of the workers in the community, as it is the human capital that holds the most valuable potential for community learning. There is a growing consensus that the best way to improve organizational learning is not to (simply) focus on capturing, codifying and documenting knowledge of individuals, but rather to concentrate on ways through which knowledge can be shared, discussed and innovated. Unfortunately, those informal learning processes are difficult to detect, because people do not consciously recall and perceive this learning, and it is difficult to evaluate the outcomes. Implicit learning often results in tacit knowledge, which is context-specific, personal and difficult to communicate (González et al, 2007)

There is a growing consensus that the best way to improve organizational learning is not to (simply) focus on capturing, codifying and documenting knowledge of individuals, but rather to concentrate on ways through which knowledge can be shared, discussed and innovated (Mittendorff, 2006). For a community of practice to function it needs to generate and appropriate a shared repertoire of ideas, commitments and memories. It also needs to develop various resources such as tools, documents, routines, vocabulary and symbols that in some way carry the accumulated knowledge of the community. In other words, it involves practice (see praxis): ways of doing and approaching things that are shared to some significant extent among members (Smith 2003). Company network also contribute to the organization which can attune their values with those of their stakeholders, clarify their social responsibilities, develop new knowledge and innovative solution to overcome problems, enhance mutual understanding and built the trust and commitment necessary for collaborative action (Svendsen and Laberge, 2005).

CLEAN WATER IN SURABAYA

Right for Water

Human rights treaties do not recognize access to safe drinking water and sanitation as a human right per se. According to UN (2007), in interpreting the right to life under the International Covenant on Civil and Political Rights, (ICCPR), the Human Rights Committee (HRC) stressed that besides protecting against the active taking of life, the right also places a duty on States to ensure access to the means of survival and requires States to adopt positive measures, notably to reduce infant mortality, increase life expectancy and eliminate malnutrition and epidemics. Access to safe drinking water also constitutes an important element for the enjoyment of the right to food. The UNECE Protocol provides a definition of sanitation, described as the collection, transport, treatment and disposal or reuse of human excreta or domestic waste water, whether by collective systems or by installations serving a single household or undertaking. It emphasizes that it should be of an adequate standard that is sufficient to protect human health and the environment.

The need of clean water of the population in Surabaya city is supplied by public water supply companies (locally called PDAM). Rather than using term of drinking water, the government of Indonesia through PDAM prefer to use the the term of “clean water” which covers a limited amount of water needed - along with sanitation requirements - to provide for personal and domestic uses, which comprise water for washing clothes and for personal and household hygiene, not for drinking and food preparation. Clean water in Surabaya is mostly consumed by household (68 percent). As a consequence of population growth, the demand for water also increased over the time. So far, the clean water production in this city has increased from 105,316,003 m³ in 1988 to 138,199,324 m³ in 1992, while the capacity production also increased from 3,339 liter/second to 4,382 liter/second during the same time. In 2007, PDAM has the capacity to supply the city with 8,145 liters of water per second from the company’s six treatment plants, which equates to 67 percent service coverage. Otherwise, those who do not have any access to water pipe have to rely on Surabaya River for sustaining their health and well being. More than 3 million people of the municipality of Surabaya rely on the river for their drinking water supply.

Hindered by its limited distribution network, PDAM is working hard to fulfill the target of 80 percent service coverage by 2010. Since clean water provided by government is not adequate, most of the demand for water in the city either for domestic or industry purpose are provided by themselves mainly from shallow wells. Unfortunately, the ground water is being degraded by saline intrusion due to over extraction and declining recharge, while the secondary aquifers are widely affected by organic pollution linked to infiltration from sewage. According to Jasa Tirta survey in year 2000, domestic activity contributes to 87% of total pollutant load in Surabaya River. The domestic waste pollution will be worse in the dry season where the water discharge in the river decrease to 20 m³ per second, while the discharge in rainy season is 60-80 m³ per seconds. The water discharge affected the dilution of waste in the river waters. Unfortunately, the condition of Surabaya River, Mas River and Wonokromo River, by monitoring which is done by Environmental Controlling Committee, generally doesn’t fulfilled the Standard Quality of

Government Regulation Number 82/2001 or Regional Regulation of Surabaya City Number 2/2004 about Water Quality Processing and Water Pollution Controlling. The sources of the pollution mainly come from industrial and other waste water, solid waste, and domestic sewage. High pollution levels caused treatment costs to increase. All surface waters crossing Surabaya are heavily polluted by gray water from households, commercial buildings, together with discharges from industries, pesticide and fertilizer run-off from agricultural land, solid waste, and fecal matter from overflowing or leaking septic tanks. According Musmodiyono (1995), industrial sector contributes to 86% of total waste water disposed to Surabaya River.

From year 2002 to 2003 ECOTON recorded 20 times of fish mass mortality caused by wastewater disposal from some industries in Surabaya River. The main cause of water pollution in Surabaya River is lack of awareness of the community to importance of Surabaya River. The people tends to consider and utilize Surabaya River as dumping site for their domestic waste. According to Arisandi (2006), the regional hospital report said that 59 % of children who suffer cancer lives along the riverbank. The children age 0-18 years suffer cancer of nervous system (neuroblastoma), lymphoma, tumor wilms and retina blastoma.

Water for the Poor

During the decentralization policy in Indonesia, good governance has been emerging as a central issue for adaptive co-management, particularly in order to fulfill the basic right on clean water. Many programs for community water, such as irrigation management reform program or water resources and irrigation sector management program, emphasizes a participatory approach to the management in a decentralized administrative and fiscal framework. Along with 113 thousand family living in poverty condition, the task of involving poor people in the planning and implementation of development efforts has to deal with contests between competing interest. Though Act no 25/2004 mentioned that “development planning system aims to optimalize citizen participation”, those who engage development planning tends to view participation with deep skepticism. Otherwise, communities prefer to do simply argue for more funds rather than focus on reflect priorities. In line with the design of decentralization which is faulty in the first place with full of legal contradictions and ambiguities, the participatory process has descended into an arena for predatory politics.

A series of capacity building program to promote participatory approach were engage, included strengthening of the capacity of district government to act as the focal point for development and management of water resources as well as empowering of the water users association for effective participation in water resource management. The problem, however, is that poor who need to become active actors in their development to enable them get the basic right are often beyond easy reach. For residents of Surabaya, clean water is the commodity which can be purchased using credit. More specifically, residents can now utilize micro credit from their local bank to afford the connection costs to their water utility. Indeed, once their credit proposal is approved, the PDAM will start running piped water directly to their residences, while monthly credit installments can simply be paid at an appointed bank. For instance, since 1975 residents of Gang Langgar Dukur

have purchased clean water from vendors, as well as obtaining water from artesian wells using an electric pump. On 15 January 2007, PDAM Surabaya completed the installation of piped water supply services to five households in Gang Langgar Dukur. Since new customers are required to cover the installation costs of both the tertiary piping leading to their home and the household connection itself, the five residents must each pay a base charge of Rupiah 2.7 million. Such a fee is difficult for low-income households to pay in one lump sum. Using a micro credit scheme allows aspiring customers to spread this cost out into more affordable, monthly installments. A one-year program allows customer to pay an installment of a little less than Rp. 300,000 per month. PDAM Surabaya anticipates that as many as 5,000 households may utilize the micro credit program to connect to the water supply network. For the micro credit program, USAID/ESP served as a facilitator of the agreement process between the PDAM and BRI. The micro credit facility provides a maximum loan Rp 2.5 billion for up to three years in duration. No collateral is needed for the program. However, some families with income less than Rp 5,000 per day, such as garbage collector or

COMMUNITY MOVEMENT

Surabaya has extensive waste economies, based on the activities of itinerant waste buyers, waste pickers, small waste shops, second-hand markets, dealers, transporters, and a range of recycling industries. Along with modern imported product, the communities have become known as “throw-away societies”. They use and throw away so many product, often after just one use. They used to do the same things for their previous traditional product. Before 1960s, household waste was made up of dirty papers, banana leaves, ceramic, glass, and terracotta. In 1970s, life changed for the communities in those kampongs. Hundreds of new products were invented, including cheap plastic goods. The modern technology has been part of an instant culture of consumption. It is hardly an accident that the phenomenon of global wholesale appears exactly.

During downturns in the economy in 1998 more people resort to waste picking as a survival strategy. While poor and inaccessible areas are plagued by pollution from uncollected wastes, many inhabitants of these areas depend upon waste recovery and recycling to meet some of their basic needs for shelter, food and employment. They desire access to good wastes as close as possible to the sources in better-off residential and commercial areas. However, it was not yet come to community water treatment.

Compos Community: The Legacy

Surabaya produces a quantity of approximately 8700 m³ of household waste per day. Within that, PELITA - Puskota is an institution concerned that its program on environmental management has contributed to give an alternative solution on this problem. Started in 2000, PELITA organized a community in Kampong Rungkut Lor to separate the communities' household waste: They were request to separate between organic and inorganic waste from their own houses. These projects have come to incorporate source separation of wet and dry wastes and thus reduce waste picking. Four years later, (2004) PELITA collaborated with Kitakyusu International Technology Association (KITA) Japan doing a research project on household waste management that resulted in the Takakura Home Method (THM). Takakura Home Method (THM) was

designed, in a simple way; to process the organic waste resulted from the household activities. THM is an effective way to reduce the volume of organic waste at family level. It is made of: a basket, skin of rice as a filter, carpet, and organic bacteria and finally, it was patented by Pusdakota - University of Surabaya. Currently, approximately 4000 THM has been distributed to families in Surabaya and other cities in Indonesia. It is a transfer of technology for the production of high-quality compost from domestic waste. KITA further developed the technology that is able to compost domestic waste in seven-day cycles generated from the largest market in Jawa Timur.

As a pilot project of Pusdakota, the Community of Rungkut Lor III have been actively proliferating places with organic vegetables and herbal plants in the spaces of their house. For the plants they use compost, as the organic fertilizer, that resulted from the household composting process. An approach favoured by Pusdakota is the encouragement of co-operatives of waste pickers a collectors, in order to improve their b gaining power vis-a-vis the waste deal who control the prices of materials and, able to exploit the base workers in the formal waste management system. The movement expanded into other communities such as Kampong Wonokromo and Gadel. In Wonokromo, the social movement had made in transforming the slum teeming with unorganized residents into the green, healthy and hygiene-conscious community it is now. The kinds of plants the Wonokromo people grow in their limited yard spaces to their waste management and effective communal work schedule inspired other communities. In Kampong Gadel, another slump area, the community energetically chopping up the mounds of waste vegetables and fruit that pile up around them from making sure that the waste is whittled down to just the right size to fit into the “Bambookura”, a specially designed bamboo basket. In just two months, the waste processed daily by Santo and friends will have become compost ready to sell for Rp.500 per kilogram.

The community movements are also done in line with the program of The Family Empowerment and Welfare Coordinating Team (Tim Penggerak PKK) City of Surabaya. The head of the organization is the wife of the Surabaya Mayor, while other coordinator positions come to the wives of official in the sub district to kampong enact any responsibilities of PKK. The head of PKK manages the distribution of the national subsidy programs, such as food subsidy program, health assistance for older people who are economically disadvantaged and baby health program for children from economically disadvantaged families. Now, it is a mandate for PKK which spread for every kampong in Surabaya to incorporate source separation of wet and dry wastes and thus reduce waste picking.

Moving into Domestic Water Treatment

It is a big challenge on involving community to take the role of planning, implementing and monitoring with support from local government and supporting institutions, particularly after such condition under authoritarian regime for more than 32 years. A series of program initiated by funding was based on premise that the community, who makes the program implementation decisions, thus would have sense of ownership of the program due to direct involvement on all the activities. It is belief that such approach stimulates the willingness of community inhabitants to do more by themselves and work

positively within the city budget limit or to contribute financially by themselves in addition. However, the rhetoric of community 'participation' in reality is just 'representation'. Community representation is a weak form of community participation.

There were several options on drinking water treatment which can accelerate the health gain associated with improved water until the longer-term goal of universal access to piped, treated water is achieved, such as chlorination, filtration (biosand and ceramic), solar disinfection, combined filtration/ chlorination, and combined flocculation or chlorination. The activities consist of (1) Treating water with dilute sodium hypochlorite at the point of use; (2) Storing water in a safe container; and (3) Educating users to improve hygiene, as well as water- and food-handling practices. In Indonesia, most of those activities belong to private company rather than social enterprises which should consider as blending the fields of entrepreneurship, social change, social responsibility and venture philanthropy (Srivastva, 2004).

To overcome the difficulties in providing clean water and sanitation to those who lack it, they moved away from "business as usual" and research novel interventions into effective implementation strategy based on community. It is a need of the community based mobilization of resources and implementation activities while dealing with low-income group's problems. The sense of ownership is very important for its sustainability and better management, which comes through community empowerment. The setting up of independent institution in communities is one of the core important aspects of it. The best practice of solid waste management has opened up new avenues for communities and confidence on them that they can do for clean water. Again, starting from Kampong Rungkut Lor III, water treatment model was initiated with community-based approach. The model was expected to encourage other kampong to adopt the best practices.

However, at an initial stage, the ceaseless outpouring of new social-ecological policy initiatives affecting the sector (locally said 'technosocial') and the overbearing burden of monitoring that accompany any statutory funding program demonstrate a profound lack of trust and indeed respect for third sector organizations, which effectively equates to a lack of trust and respect for the citizenry at large. Secondly was some indication that the term originated in the voluntary sector itself which now most keen to clarify the difference between volunteering and mandated activity. Unfortunately, the former donor policy made 'easy money' for the communities. Everyone who involved the activities initiated by donor will get allowance. That made the traditional voluntary system was damaged. It has been raising question on sustainability of the 'change'.

The project intervention in these frontier areas poses particularly difficult challenges for donors and requires new thinking and support for innovation. Moreover, this kind of bottom-up perspective might contribute to a better understanding of local economic development. The question is if the program managers are familiar with the concept of social network in micro-finance and if that so, is the scheme of micro-finance seen as a relevant area for social network restructuring.

Raising Participation

While a group of women and man were asked about their role in social-ecological policy, these participants stated that they were capable of participating, that issues of domestic responsibility could be easily resolved with simple implementation, such as domestic waste management. However, they stand in a different relationship to their environment, in particular that women group are more responsive to their household activities related impacted the water. The group of man more concern on financial income and their work activities rather than their household environment, such as water.

As there is no municipal sewage system within the communities, all household waste is sent to a septic tank located somewhere under the garden. In many neighborhoods the septic tank is simply a hole in the ground with layers of coral rock at the bottom to filter the water. Poorly constructed or old septic tanks or septic holes leak raw sewage which eventually leaches down into the groundwater supply. As a result, dangerous Coliform bacteria are commonly found in groundwater. Unfortunately, most the households have individual wells that supply water for household needs which actually shallow wells of around 5m on average.

Most of the community members did not believe that the women group would wish to be involved but that a number of women would want to and be prepared to. Along with pressure from the leaders, they believed that it would benefit community organization if they were involved as they were often the people with hands on responsibility for resolving individual and community issues. Without doubt, the leadership role of the women who experienced as group leaders and consolidation the communities have been fundamental in solving their housing problems and in successfully moving from an individual to a collective vision. In those women organizations we observed, there were informal hierarchical social networking. When critical decisions were to be made, individuals often enlisted support above the level of their immediate superior. This is an informal network system for making decisions, particularly when the communities determined the priorities issue.

The individual who becomes the group leader will supply more monitoring effort than in the benchmark case, because of the reduced per unit monitoring costs. As a consequence, the non-leader free-rides on the higher level of monitoring of the leader and reduces her monitoring effort. It can be beneficial for the most profitable entrepreneur to volunteer to be the group leader. However, we are aware of the partial equilibrium character of our model, which is the result of the assumption that the two most profitable entrepreneurs always put high effort in their projects.

CONCLUSION

Grass root community organizing is a critical component of governing social-ecological change. It is about effort to mobilize and empower a socially linked group of people by building democratic organization capable of taking effective action on problem and issue that concern the community. Within governing social-ecological change, voluntary simplicity is a growing movement of people who have realized that happiness and fulfillment do not lie in having more money, or new and bigger things, but rather in the

time with loved ones and connection with community. In this governing social-ecological change, the organization takes important role on spread up the movement. The promotion of waste recovery and recycling is recognized as a way to improve solid waste management for the city while serving social development. This is the most prominent example in Surabaya being given to partnership between government and non-governmental organizations to address issues of waste work and the relations of informal to conventional solid waste management. How issue are framed impact the collective social interpretation that determines how problem are seen and understood by movement supporter and the broader public. More over, when the communities tried to increase the efficiency of waste services with more mechanization, friction between formal and informal waste systems increases.

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