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Examination of the Philosophy of Cooperative Action as Applied to Philippine Community Forestry

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Abstract

This paper looks into the philosophical imperatives of collective action as applied to communal forestry in the Philippines. A product of a case study confirming the assessment of the general reviews of the failure of the communal forestry program in the Philippines, this article found the need to create a livelihood that would encourage cooperation - a livelihood that the community should do together to develop a cooperative lifestyle among the members. This type of livelihood is seen as a solution to the massive deforestation and poverty in upland forest communities. An old example of this livelihood is hunting which requires a group effort. Another is the agro-forestry in the rice terraces of northern Philippines with a land-use system that is founded on a family tenure on the forest lots called "muyong" which provide irrigation for the rice fields and water for the settlements and fishponds below. The key to the success of these pursuits in forest management are well-thought out restraints to free riding activities. These restraints should be developed not only through moral suasion and regulation but through the nature of the activities themselves which makes cooperation inevitable. The philosophical underpinning of the problem is the motive of sociability in economic collective action and the principle behind the effort to sustain it. Hence the study asks the philosophical questions "Is sociability innate human character or merely developed and conditioned by economic and self-interested imperatives, in particular the nature of the economic activities?" "If sociability is conditioned by the nature of economic activities, should these economic activities be encouraged by institutionalizing programs to develop them?" "Or should those communities with a highly-entrenched sociability culture be the only ones to be awarded the forest land stewardships and corresponding development assistance?"

Keywords: Economic culture, Forest management, Sociability

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Introduction

In the era of climate change, forest authorities have to select the most workable system to manage the forest resource. As social forestry is needed for efficiency and environmental reasons, the philosophy of cooperation in collective undertaking needs to be examined. This article looked into the results of the studies on the philosophy of cooperation in the light of recent studies that tried to challenge the canonical view of human selfishness and examined the findings in relation to the behavior of social forestry managers in the Philippines.

The article used the results of the author's case study on a communal forestry program- implementing people's organization (PO) and juxtaposed them with the results of nationwide evaluation of the program and with the cross-cultural economic experiments on self-interest.

Theoretical Analytics

The philosophy of self-interest was developed by Smith (1776) at the onset of the industrial revolution to illustrate the nature of the economic man whose interest unconsciously promotes the good of the society when it joins the interests of others. Altogether all self-interests naturally harmonize towards the common good as these propel the workings of the market.

In the 1990s up to the mid-2000s, some experimental economics studies conducted challenged the philosophy of human selfishness (Roth, 1995; Fehr and Gachter, 2000; as cited in Henrich et al., 2005). These studies used games from game theories and experimental rules as tools to gauge the behavior of university students as research subjects.

The researchers produced significant conclusions like "Subjects care about fairness and reciprocity and will sacrifice their own welfare to change the distribution of material outcomes among others at a personal cost to themselves" and "sometimes reward those who act unselfishly and punish those who do not" (Henrich et al., 2005: p.2). However, while significant deviations on human self-regarding model were generated, the Machiguenga data yielded an outlier case (Henrich, 2000). Machiguenga is a southeastern Peruvian Amazon society from which student game players in the study came from slash-and-burn horticulturalists, a socio-economic circumstance that suggested to experimenters to redesign their experiments for implementation in quite remote areas and among non-literate subjects.

Hence the conduct of a modified, repeat cross-cultural experiment on 15 small-scale societies by Henrich et al. (2005). The repeat study used public good games (PGG) as voluntary contributions (VC) and common-property resource (CPR) games and played ultimatum and dictator games. Two years later the ethnographers came up with the following conclusions, among others:

1) The selfishness axiom is not supported in any society studied, and the canonical model fails in a variety of new ways.

2) Behavior in the experiments is generally consistent with economic patterns of everyday life in these societies (Henrich, 2005: pp.44-47).

A little more detail on the Henrich et al. (2005) study findings are in order:

1) On variability of prosocial behavior across groups, the study concluded that overall some groups are more cooperative or prosocial than others. The turnout of cooperative behavior correlated positively with societal payoff to cooperation and characteristic pro-sociality in everyday life.

2) On the finding that cooperation is in direct proportion to payoff to cooperation, the following proofs were given. Groups like the Machiguenga and Tsimane were found to be less cooperative with those outside the family, finding that was attributed to these groups' characteristic as "almost entirely economically independent at the family level and that no one's economic well-being depends on cooperation with non-relatives." (p.20) In contrast, the Lamalera group exhibited more cooperative behavior because its economic life, whale hunting, depends on the cooperation of large groups of non-relatives.

3) On cooperation being consistent with everyday life: Higher scores in pro-sociality were related by the experimenters to cooperative practices in everyday life. For example, the Orma households recognized public good games similar to the harambee, a locally-initiated contribution that Orma households make when a community decides to construct a public good like a road or a school. The Ormas labeled the PGG "the harambee game" and contributed generously.

The Lamaleras of Indonesia exhibited cooperativeness in the ultimatum game (UG). The experimenters interpret the behavior of the group to be similar to whale, or other large catch, divisions. A "specially designated person meticulously divides the prey into pre-designated parts allocated to the harpooner, crewmembers, and others participating in the hunt, as well as the sail maker, members of the hunters' corporate group, and other community members (who make no direct contribution to the hunt). Because the size of the pie in the Lamalera experiments was the equivalent of ten days wages, making an experimental offer in the UG may have seemed similar to dividing a whale." (p.31).

The Achés in Paraguay regularly share meat, the hunters even forgo their share during sharing and leaving the catch outside the camp to avoid suspicion of boastfulness. The experimenters relate that "When asked to divide the UG pie, Aché proposers may have perceived themselves as dividing the game they or a male member of their family had acquired, thereby leading 79% of the Aché proposers to offer either half or 40%, and 16% to offer more than 50%, with no rejected offers." (p.32).

Some important questions raised by the study resulting from the greater behavioral variability generated in contrast to the lesser degree of variation among university students in earlier studies asked why members of different groups behave so differently and why there is so much variation between human groups. The study advised scholars that in addressing these questions, they should consider "theories that explain why and how different dispositions,

different sets of contextual rules, or different modes of information processing spread in different groups and how they are maintained." (p.47)

The Relative Failure of Social Forestry Management in the Philippines and the Need for Pro-sociability of Managers

It is against the above developments in the discourse on human selfishness that this article situates the problem of social forestry management in the Philippines. If community forestry, which the Philippine government has relied on to protect, rehabilitate and develop its deteriorating forest ecosystem, is to succeed, this study posits the condition that policy should consider the pro-sociability of forest managers.

Dealing with the commons' dilemma in open-access forestlands involves setting up of the best management systems and strategies that will protect, rehabilitate, preserve and develop these areas. An unmanaged common, according to the revised theory of Hardin (1994), is prone to the tragedy or dilemma of uncontrolled utilization by users until the common becomes useless to anyone.

The Philippine government's adoption of community or social forestry was a way of solving the commons' dilemma. From the implementation of social forestry in the late 1970s up to the present, forest authorities have been hoping that by letting the community of stakeholders, rather than outsider individuals and groups with no lasting interest in the place, take care of the forest, they could install an automatic check against unrestrained entry of forest abusers as well as leave the burden of regulation on local communities.

The Community-Based Forest Management (CBFM) program was the chosen strategy of the government to deal with the twin problems of poverty and destruction of the Philippine forests. The title of the program suggested that the forest managers were the members of the community in a locality where tracts of degraded forestlands were consolidated into an area for reforestation, protection, rehabilitation and development. The community, the members of which were bound together, at the minimum, merely by residence in the area, was given tenurial security in exchange for the commitment to manage the awarded forestland for twenty-five years, with an option of extension to another twenty-five years.

As of June 2005, the tenth year of the program's implementation, CBFM beneficiaries have reached more than 1,500 communities covering around 1.5 million hectares nationwide (Acosta et al., 2005: p.i).

From the 1500 communities, there appeared to be only relative success in the program as lamented by the DENR, forest policy researchers and representatives of foreign funding institutions.

For instance, the DENR Region 3 report (2005) noted little accomplishment in terms of the survival of planted trees, livelihood creation and sustainability of economic activities introduced, and little, if not complete lack of, knowledge by the CBFM forestland beneficiaries of the plans they committed in the Community Resource Management Framework (CRMF).

The Ford Foundation study conducted by Borlagdan, et al. (2001) noted better accomplishments among organic communities or those communities that developed naturally out of commonalities in culture, geography and psychology than incipient ones or those organized externally by NGOs or the state and whose members did not necessarily possess shared history and beliefs (pp.93-114).

The Ford Foundation study likewise underscored the tendency for CBFM participants, particularly the incipient ones, to revert to the commons dilemma, free riding, after the completion of projects in CBFM areas that came in trickles and in short duration (p.111). The policy study further observed that the projects served as a unifying factor for incipient communities during the project life. However, once the project ended, the members discontinued collective activities like patrolling, and resumed free-riding or destructive activities as illegal logging, excessive charcoal making and fuelwood gathering. Free riding has also been observed more in communal areas than in areas with individual tenure (p.73).

Autoethnographic/Case Study of an Incipient Community in CBFM in the Philippines

CBFM was adopted in the Philippines on the argument that the commons are better managed communally in many respects to wit: benefits from economies of scale, environmental consideration warranting land indivisibility in volatile areas and fragile slopes, efficient management where resources are scarce, and equity objectives served by including former users.

However, an assumption in the CBFM program in regard to communal management is problematic. This is the assumption that all communities, whether organic or incipient, whether homogenous or heterogeneous, could work towards the realization of the CBFM forest management objectives. This assumption is evident in the definition of the community adopted by the CBFM program in DAO 96-29, Art. 1, Sec 4: "a community is a group of people who may or may not share common interests, needs, visions, goals and beliefs, occupying a particular territory which extends from the ecosystem that goes with it."

The DENR expects that the Filipino culture of bayanihan would work in all cases. Bayanihan is a prehistoric-old Filipino practice which means working together. In this practice, members of the community take turns in assisting each other during planting and harvesting. The practice developed a gift economy where each farm household expected to be helped in return for the assistance it extended. The gift economy practice extended to all other areas of Filipino life where instances of exchanging favors were needed. When the favor was not returned a negative spirit between or among the parties involved arose and the one who did not receive reciprocation held a grudge and named the ingrate "walang utang na loob" or had no sense of gratitude. The practice of bayanihan or the Filipinos' gift economy had been greatly eroded when farmers learned to hire workers instead of availing of bayanihan assistance. But

it continued to be practiced in organic communities in various collective action forms.

Considering the general lack of cohesion among the members of the incipient groups, it would take years, as it did for the organic groups, to develop common history and gift economy culture and consequently cooperative behavior among community members. Hence, many years of community organizing is needed. Since the POs do not have resources for community organizing and the government can only finance this activity in selected model sites, they will inch slowly to the desired level of group cohesion.

The author examined the plausibility of this assumption based on the results of the international cross-cultural studies on pro-sociality, general experiences nationwide and in the case study conducted on a CBFM-implementing people's organization. The results of the first and second examination are presented above. Below is a discussion of the results of the case study, conducted using autoethnography which means the author participated in the everyday conduct of the CBFM. The author participated from inception to implementation for over a period of 9 years to be able to understand, to help in finding the solutions to everyday problems and to document the workings of the program (Sebastian, 2010).

Overall, the case study revealed that there were PO members who were more collaborative and there were members who were not. The Ilocanos who were carriers of a culture of industry and thrift were more collaborative and conscientious in their work while the Pinatubo Aytas, indigenous people around Mt. Pinatubo, especially older ones who were still generally foragers, were less cooperative. The latter were not lazy (as they were stereotyped to be by the mainstream population), they exerted a lot of effort to survive, but their skill, hunting and gathering, was incompatible with the forest management objectives of CBFM that included planting and replacing harvested trees. The Aytas' non-cooperative behavior was in economic sense, rationalistic, self-regarding and maximizing. They preferred immediate rewards to their efforts rather than delayed benefits from long-gestating tree planting activities.

The findings in the case study were confirmed by the DENR personnel as consistent with the experience of the rest of the POs in Zambales Province, all 36 of them with mixed memberships of Aytas and non-Aytas. Most Aytas in Zambales were Pinatubo victims dispersed in lowland resettlements since the early 1990s. Many of them intermarried with migrants who have imbibed their culture and depended on Mt. Pinatubo's eruption charities.

Capital is needed for the costly production and maintenance inputs as well as for community organization and capacity building. An incipient community would need years of community organization. Since incipient communities do not possess the shared culture and history that organic communities have developed over many hundreds or thousands of years, collaborative undertaking would need financial infusion from the government to accelerate the desired action of working together.

Meanwhile, the means to access capital are limited. Both credit and partnership with big private investors that the DENR allows CBFM POs to

enter into are risky considering the insecure tenure of the stewardship of the CBFM areas and the limited capacity of impoverished and illiterate members to assume the risks. Hence, unless the government is willing to finance such artificial processes of developing pro-sociability among the CBFM PO members, utilizing incipient communities for forest management may register failure in the program again in the next program evaluation.

Indeed, such assistance is critical to the relative success of some forest rehabilitation projects of the government under the CBFM program umbrella. In the 2007 study on Forest Restoration and Rehabilitation in the Philippines by Lucrecio L. Rebugio et al. (2007), the authors gave case studies of forest rehabilitation projects and noted that the relative success of which could be attributed to either government or private sector assistance. One of such case studies was that of the Elcadefe CBFM Planters Association in Sta. Fe, New Corella, Davao del Norte. It was funded by Japan Bank for International Cooperation (JBIC), assisted in community organizing and in the full payment of the PO members working in the fields and plantation inputs and maintenance (p.151).

As a result, the people's organization was able to establish 1,232.93 hectares of forest area with an average survival rate of 85.23 percent of trees planted. Moreover, household income reportedly increased from PhP13,757.39 in 1995 to PhP19,257.50 in 2002.

Understandably, the government assisted the project through the JBIC Grant because the forest was earmarked to generate electronic power through hydropower construction along the Saug River. But unless similar support is given to other POs, there is little chance of their forest management projects succeeding. It is interesting to note that despite the assistance extended to the Elcadefe PO, the Rebugio, et.al study still lamented limited the two-year time for community organization which it claimed to have caused the less-than-expected outputs. With two years of DENR-assisted community organization and the authors still find the effort wanting, it easy to imagine why unassisted POs failed on the first decade of CBFM implementation.

Organic Communities in Forest Management in the Philippines

One of the successful commons' stories used by scholars worldwide is the Philippine northern rice terraces land-use system. The northern indigenous communities built the majestic upland rice terraces that boast of an ingenious system of irrigation through the sharing of sheer labor. Filipinos in the north operated the terraces that succeeded for hundreds to thousands of years.[1]

The rice terraces existed long before governmental intervention to control the irrigation systems, a fact that history bears out since the rice terraces have been there prior to the arrival of the Spaniards. It consisted of various indigenous irrigation systems developed without any engineering skills or financial assistance from the state. The construction of the terraces "consisted

[1] The age of the rice terraces is not certain as scholars differ in their assessment. See Beyer, 1955, Keesing, 1962, and Conklin, 1980.

of digging out the hillside and building a stonewall on the edge of the terrace, which required large amounts of labor in its construction…" (Raby, 1997: p.3). The National Irrigation Authority discovered that this system suffered periodic deterioration due to the poor materials used, and brought together communal labor to work in reparation practices. In spite of the fact that no one had exclusive rights over the use of the system, the terraces at the head of it had priority. Hence, those at the upper levels had the obligation to release water to the lower level and subsequently until reaching the lowest farm. The social infrastructure of traditions of working together held the system.

Ostrom (1990) learned that from this mixture of traditions the zanjeras emerged. The zanjeras in the northern Philippines impressed Siy (1989: p.21) as "indigenous irrigation associations…which are generally considered exceptionally well organized" because the zanjeras involved a complex set of activities including construction, maintenance, water allocation, and conflict management.

It is important to note the payoff to cooperation in the zanjeras, both on the part of farmer-landowners and the landless farmers who joined the associations. The landless farmers aspired to acquire portions of land in return of building zanjeras and recognized that the landowner should retain ownership while permitting them to use the land. Known as "sharing of the land", the system operated with some 40% of farms cultivated by leaseholders, mostly on a share-cropping basis. (Raby, 1997: p.3).

CPR scholars underscore the cultural backbone behind the construction of the terraces and the zanjeras (Siy, 1989; Raby, 1997; Ostrom, 1990): the Filipinos' filial piety inherited from the Chinese, the bayanihan system, and pakikisama (camaraderie). The family figures in the terraces and zanjeras as an important factor: it is important for Filipinos that land can be transferred to their children. Transferability of land to family members is an incentive. Bayanihan or working together enables the irrigators to cooperate as a result of a long time of association and trust that when one helps a neighbor, he or she can expect that the gesture will be returned. Pakikisama or smooth interpersonal relation brings out trust or tiwala.

A tenurial feature that has blended well with the land-use system of the Ifugao rice terraces and the filial piety of the Filipinos accounts for the success of the communal arrangement of the irrigation system. The DENR Treebu (2005: pp.8-9) hails the agroforest ecological zones of the Ifugaos. The rice terraces have a built-in land use system that has worked for centuries. There are two types of forestlands in Ifugao: the muyong or family woodlots and the communal forests which are open to everyone. The muyong is taken care of by families, ensured that it is always productive and worthy to be inherited by the next generation. It is the source of wood for building houses, for fuel and woodcarving. As communal forests are open to everyone and large areas have been claimed by government, the community relies on the muyong—at the topmost elevation of the payo or the terraces—as a source of water for the terraces below: the habal or swidden lots, the boble or the settlement districts and the wangwang or the braided river beds.

The DENR and forestry scholars are impressed by the forest dual land ownership system in Ifugao, the muyong system with individual family-owned woodlots and the communal system. Recognizing how the dual ownership system worked, the DENR secured through the Indigenous Peoples' Rights Act the restoration of such systems among the indigenous peoples. It is evident that in the zanjeras built outside Ifugao, the incentive of individual land ownership in exchange for the participation in building the irrigation system was also a motivation for collective action.

A forest management counterpart of Ifugao is that of the Ihan Reforestation Project in Kiblawan, Davao del Sur. It is seen as having relatively succeeded because of the family approach, "where each family planted trees on their own claims and private lands which are very near to them." (Rebugio et al., 2007: p.149) The Rebugio et al. study observed that planting trees for their (farmers') "own benefits alone is already a good incentive to them, especially as they were given free seedlings and were paid for their labor during planting, maintenance and protection." Further, the study noted that this reforestation project "has provided employment to the PO members", the planted trees grew well, and the 17-hectare area developed into an eco-tourism site.

Conclusions and Recommendations

Many CBFM areas have been found to be managed by struggling POs. For the lack of sustained livelihood in the forest, the lure of mining the resource thanks to big mining investors, have tempted some. Others have abandoned the CBFM award and only a substantial opportunity to develop the area could make the leaders come back to manage it again. In the meantime, the impoverished residents go back to destructive practices such as charcoal making, that in many cases produce forest fires, overgrazing and over-harvesting the indigenous plants and trees as well as those newly-planted by POs.

The causes of failure are the lack of cohesion of the members of the CBFM POs as well as the fact that the chosen CBFM awardees are knowledge-poor and capital-short individuals. In search of the best practices for climate change adaptation, the government should consider introducing the northern rice terraces in the CBFM areas. The northern rice terraces of the Cordillerans have built-in climate change mitigation and adaptation features because it ensures sustainable protection and development of the resources through mechanisms that encourage cooperation. However, the level of pro-sociability of the POs to be given the responsibility should be a prerequisite of a financial award to assist the POs in developing and managing the terraces.

The lessons of the cross-cultural studies on the nature of pro-sociability of the groups of people and Philippine-own northern Cordilleras should be heeded by the DENR: that pro-sociability emanates from many years of practice of cooperation and that its secret lies in the individual interests served within the members of cooperating groups. In the final analysis, the utilitarian view on

human self-interest is still at work in cooperating groups: humans cooperate when there is an incentive to cooperation. In the case of the rice terraces, the incentive to cooperation is the livelihood created resulting from the sustained irrigation water coming from the muyong which could be managed by the clan or organic groups in or around the CBFM area.

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