

13 Decentralization and NGO initiatives for community-based sustainable forest management: a case study in West Kalimantan, Indonesia

YAMADA Masaaki

1. Introduction

Since the step-down of ex-President Soeharto the ongoing process of decentralization has caused considerable sociopolitical and economic shifts in rural Indonesia. While net revenue transfer from the central government to local governments increased after the year 2000 (Usui 2003), particularly in the Kabupaten and Kota districts, disparities among local governments were apparent due to unequal distribution of tax revenue sources (Suharyo 2000). Eighty percent of tax from forestry, mining and fisheries were ceded to local governments while central government retained twenty percent (SMERU 2001). Hence districts rich in natural resources have gained the potential and motivation to exploit these resources in order to acquire greater fiscal strength for propelled development. Those with limited resources, however, are also urged to utilize whatever available in their jurisdiction for surviving the rapid administrative framework changes. One of the largest and most precious of tropical rain forests of Asia may thus face the unprecedented risk of deterioration (Matthews 2002, Figures 1&2). This paper discusses Indonesian NGO initiatives for conserving forests while promoting sustainable development in the region.



Figure 13.1. Deforestation by gold mining



Figure 13.2. Forest degradation by fire

2. Materials and Methods

This case study focuses on the NGO Dian Tama Foundation (Yayasan Dian Tama - YDT) in Pontianak, West Kalimantan, and its activities in community-based forest management and reforestation (Ahmad et al 2001, KPYDT HP1). The Foundation is currently operating an integrated rural development program in West and Central Kalimantan Provinces, and a relief and restoration project in Nanggroe Ache Province after the tsunami disaster of December 26, 2004 (TEAM 9 HP, KPYDT HP2). It works in collaboration with local, national and international NGOs and business entities, domestic and foreign official development agencies, and the United Nations (UN) organizations such as the Consultative Group on International Agricultural

Research (CGIAR) institutes (YDT 2002). The YDT's unique approach to local communities focuses on appropriate technologies for non-timber forest production, alternative marketing, safe drinking water and basic education. It has recently attracted global attention (BCN HP).

This author made two visits to YDT and its project sites in West Kalimantan in July 2001 and August 2002 (Figures 13.3 & 13.4), and follow-up communications with the YDT headquarters and its Jakarta branch office by e-mails, faxes and telephone calls. Through site observations and interviews with the NGO staff and local beneficiaries, combined with a study of YDT publications and documentation, their achievements, constraints and future perspectives were identified. Other Indonesian local and national-level NGOs that focused on forest conservation and community forestry promotion were visited in Pontianak, and Jakarta and Bogor in West Java, to make key informant interviews and documentation surveys.



Figure 13.3. YDT training facility



Figure 13.4. YDT charcoal kiln site

3. Findings and Discussion

3.1. Background of YDT

Three ethnic-Chinese brothers of the Utama Family, Daniel, Johnny and Rudy, founded YDT at their hometown Pontianak, capital of the West Kalimantan Province in 1987. The Province has been a historical center of Chinese migration to Southeast Asia, represented by the Lanfang Republic (1777-1884) seat in Mandor. However, according to the brothers, it declined due to Dutch invasion, and Japanese occupation during the World War II. This involvement wrecked the Incident of Mandor (1943-1944) through which one generation of leading human resources of the region was lost (Figure 13.5). In the Utama family five out of ten uncles and aunts were martyred in the War. Since then stagnation of the Province dragged on until the period of the brothers' adolescence. The three of them were university-educated in Java and influenced by their devout Catholic parents, so simultaneously they pursued both charitable enterprise and family business in order to achieve the sound redevelopment of their homeland.



Figure 13.5. Monument dedicated for the victims of war against Japan 1942-1945

One of their sisters, Elly, a founding member of the Indonesian Forum for the Environment (WALHI), married to Aryanto Sudjarwo, the head of the fuel-efficient stove section of the energy division of Dian Desa Foundation (YDD) in Yogyakarta, Central Java Province. With recommendations from Aryanto, and his elder brother Anton Soedjarwo (YDD president and a 1983 Ramon Magsaysay Awardee for community leadership), the Utamas decided to focus on the income generation of small farmers with coconut shell charcoal making. In the lowlands of West Kalimantan, a huge number of coconut shells had been discarded each year. They clogged the canals that served for boat transportation and for daily water uses such as cooking, bathing and washing cloths. YDT disseminated among local farmers one of the simplest and most efficient methods of producing coconut shell charcoal using old drums (JANIC/NTDF 1992, ICCA HP, ARECOP HP, Sugiura 1996). They purchased the product from farmers, processed it into charcoal briquettes named Coccocha, and shipped them to Europe where local NGOs and trading companies promoted them as environmentally friendly fuel for barbeques (COCOCHA HP).

On the occasion of the International NGO Symposium on Appropriate Technology and International Cooperation, in December 1989 in Tokyo, co-sponsored by the Japanese NGO Center for International Cooperation (JANIC), the New Technology Development Foundation (NTDF) and the Japan International Cooperation Agency (JICA), the YDD president Anton Soedjarwo was invited as a keynote speaker. He also participated in the unit session on alternative energy. He requested technical assistance for YDT from the Japanese resource personel from Sumiyaki-no-kai, Dr. Sadakichi Kishimoto and Dr. Ginji Sugiura (JANIC/NTDF 1990). Since then, the International Division of Sumiyaki-no-kai, which became the International Charcoal Cooperative Association (ICCA) in 1994, has been collaborating with YDT through planning and implementing projects for technology transfer and development in Indonesia, Japan and other Asian countries (Hirowaka 2004).

3.2. Accomplishments of YDT

YDT has built up its staff capacity and enhanced the scope of its activities to manage integrated community development. This has been made possible by the technical inputs from YDD, in community organizing and making improved cooking stoves and rainwater tanks, and ICCA, through the efficient charcoal production methods and multipurpose use of charcoal and byproducts for agriculture and reforestation. In 1993, YDT established the Integrated Charcoal Technology Development Center (PPTAT) at Toho Hilir of

Toho Village, Pontianak District. They installed in the undulated twelve-hectare area the following: a demonstration farm and training facilities including an auditorium, dormitories, extension offices, rainwater tanks, charcoal kilns, upland vegetable field, rice paddy, pigpen, henhouse, tree nursery and secondary forest conservation and reforestation plots. The Japanese Embassy in Jakarta extended the grant assistance to grassroot projects (GAGP) to YDT for purchasing small-scale farm machinery. At PPTAT they studied and demonstrated the production and application of charcoal and pyroligneous acid. These are needed in order to realize sustainable agroforestry systems viable for small family farms (Institut Dayakologi HP). Various local and international training courses on community forest management, charcoal making and organic agriculture have been organized there. Furthermore, they accepted local students, including those from the higher education sector for practical exercise, scientific research and graduation projects. In 1993, YDT also began disseminating rainwater tanks for safe drinking water in West Kalimantan with the fund from the International Volunteer Saving of the Japanese Ministry of Post and Telecommunications. In 1997, YDT received the Fifth Environmental Minamata Award for their dedication to sustainable rural development. In the same year ICCA established the Dian Tama Support Group (KPYDT) in order to help with the consolidation of YDT finance. These funds facilitated further developments of PPTAT and YDT initiatives based there.

In 1996, YDT began working for a Participatory Forest Management Area (PFMA) of the Deutsche Gesellschaft für Technische Zusammenarbeit GmbH Social Forestry Development Project (GTZ-SFDP) in Sanggau District, West Kalimantan Province (BCN HP1). This PFMA was a former timber concession of 102,000ha, which was awarded to GTZ in 1990 by the Indonesian Department of Forestry on a ten-year lease as a community-based forest concession. There were 17,000 residents living in more than 60 hamlets in the area. Principal funding for YDT initiatives in the area, for developing bamboo (*Bambusa* spp., *Dendrocalamus* spp., *Gigantocloa* spp.) and rattan (*Calamus* spp., *Daemonorops* spp.) weaving and damar (*Shorea* spp.) resin tapping industries, and socioeconomic and biological monitoring, came from the Biodiversity Conservation Network (BCN) of the Biodiversity Support Program (BSP), which was funded by the United States Agency for International Development (USAID) (BSP HP). Additional technical support was offered by the Appropriate Technology International (ATI; today's EnterpriseWorks Worldwide - EWW) (EWW HP).

The BCN chose YDT as its partner because BCN was testing an enterprise-based approach to conservation, or the hypothesis that 'if local people can benefit from using their forests, they will take action to conserve them.' YDT probably had as much or more previous experience than any of the BCN partners in running a business (BCN HP2). In this regard this author found five reasons accounting for the strength of YDT. 1) The founders were of ethnic-Chinese origin in Pontianak and had good human relations links, and skills in doing business in Kalimantan, where the ethnic-Chinese had established their commercial network in every corner of the interior villages. 2) YDT's executive director Donatus Rantan, a Catholic-college educated philosopher, was the heir to the Ketapan Dayak chieftain, and the majority of YDT staff members were the Dayaks from various regions of the Province. 3) YDT chairman Rudy Utama was an engineer who understood quality control, and promptly learned and applied the appropriate technologies from YDD, ICCA and other international sources. He is fluent in five languages, namely Bahasa Indonesia, two Chinese dialects, English and Japanese. 4) YDT had a branch office in Jakarta, where Johnny Utama was stationed that markets Coccocha and other products. This is done through their trading company PT Dian Niaga, which exports to Europe, the US, Singapore and Japan (Utama 2001). 5) Another sister of the Utama

brothers, Silvia, was running a leather products factory named PT Pilluss in Jakarta. She processed the hand-woven rattan bags from PFMA as sophisticated fashion items for export to foreign boutiques with the Indonesian brand names Pilluss and Andini (PILLUSS HP).

By the end of the PFMA project in 1998, YDT organized rattan bag producers in the area, and some local farmers started replanting rattan after its harvest (BCN HP2). The Wetlands International (WI) took notice of this and invited YDT to Danau Sentarum National Park (DSNP) in the Kapuas Hulu District to replicate their community development strategy within the Park (BCN HP2). Here Dian Mandala Foundation (YDM), a subsidiary of YDD, and headed by Aryanto Sudjarwo, operated (Wickham 1996). YDT was awarded a grant from the British Embassy in Jakarta and worked at DSNP through the year 2000. In that year YDT gave birth to a local community-based NGO called the Riak Bumi Foundation (YRB) (Danau Sentarum HP). Ms. Noriko Toyoda, a Japanese student and one of the volunteers dispatched to YDT from the Volunteers in Asia (VIA) program (an NGO based in Stanford, California, USA (VIA HP)), played a catalytic role in this event. YRB was focused on beekeeping, fishery, community-based tourism, forest fire prevention and reforestation, and other integrated community development initiatives. YRB has been receiving principal support from the Borneo Project of Berkeley, California, USA, which is an NGO active in Malaysian part of Borneo and for which Noriko works as an intern (The Borneo Project HP). The apiculture of YRB has been included in the database called 'Best Practices on Indigenous Knowledge,' created since 1999 by the Netherlands Organization for International Cooperation in Higher Education/Indigenous Knowledge (NUFFIC/IK-Unit). This has been done in cooperation with the Management of Social Transformations Programme (MOST) of the United Nations Educational, Scientific and Cultural Organization (UNESCO) (UNESCO HP1, HP2). In 2001, the YDT chairman Rudy Utama was invited to the International Conference on Tropical Ecosystems called Structure, Diversity and Human Welfare, held in Bangalore, Karnataka, India, and sponsored by the Association for Tropical Biology (ATREE HP). In a symposium there titled 'Harnessing Market Forces for Biodiversity Conservation,' Rudy presented a paper on YDT challenges with non-timber forest products (NTFPs) in West Kalimantan. In 2003, YRB and YDT staff members were sent to Nilgiris of Tamilnadu, India for a technical training in apiculture and honey processing with financial support from the NTFP Exchange Program (NTFP.org HP1, HP2). In the same year the two NGOs jointly coordinated National Forest Honey Workshop of the Indonesian Forest Honey Network held in DSNP.

Besides development and extension initiatives, YDT has also been actively participating in joint research with national and international entities such as Tanjungpura University (UNTAN), the Japan International Cooperation Agency (JICA) and the Center for International Forestry Research (CIFOR). YDT's primary research interest has been secondary forest management and reforestation for sustainable fuelwood and charcoal production. YDT identified laban (*Vitex pubescens* Vahl.), as an underutilized local pioneer species, and a potential material for making hardwood charcoal (Figure 13.6). Their study with UNTAN focused on the production of laban seedlings (Sriwardani 1997) and enrichment planting with laban and other useful tree species in the secondary vegetation of PPTAT (YDT 2001, ICCA 2001). JICA was interested in ICCA's technical input to YDT and their cooperative study, since 1999, on the Clean Development Mechanism (CDM) funded by the Global Environment Centre Foundation (GEC) of Japan (GEC HP). JICA contracted YDT for an experimental production of *Shorea* spp. seedlings using charcoal mixed substrate (Figure 13.7), as a part of its CDM research project based in Bogor. Among others YDT collaborated closely with CIFOR in Bogor, and its researcher Dr. Wil de Jong, in their reforestation study of

alang-alang (*Imperata cylindrica* (L.) Beauv.) grassland using laban seedlings (Figure 13.8). By involving Dayak and Mulayu swidden farmers they chose as the participatory research site abandoned upland fields in the Tumbang Titi Village of the Ketapang District. It was hometown to YDT's executive director Donatus Rantan. In 2001 this author visited Tumbang Titi and witnessed that the laban experimental plots in their third year were well maintained within the grassland. Some of them were already shading and suppressing the vigor of alang-alang. There was no fire damage so far and some farmers allegedly had Muslim prayer meetings at their mosque to protect the plots from burning. This author also observed local farmers practicing impressive traditional homegarden (pekarangan) around their cottages. It meant alang-alang grassland was returning to agroforest (Figure 13.9). Numerous papers on the research and extension of the laban reforestation experiment were co-authored by the members of CIFOR and YDT (de Jong et al 1998, Kusmina et al 1998, Sriwardani et al 1998, Arocena-Fransico et al 1999, Harwood et al 1999, Utama et al 1999, YDT et al 2000, CIFOR et al 2000, CIFOR 2002a & 2002b, The World Bank 2003).



Figure 13.6. Vitex plantation at PPTAT



Figure 13.7. Shorea nursery at PPTAT



Figure 13.8. Vitex planting in Imperata



Figure 13.9. Homegarden in Tumbang Titi

3.3. Challenges to YDT and Indonesian NGOs

Since the early 1990s and especially around the year 1998, community forestry and social forestry movements supported by Indonesian NGOs flourished nationwide (Inoue 1998, Hidayat 1998, Moniaga 1998, Nanang 1999, Okamoto 2001, Colchester 2002 & 2003). The government of Indonesia through its democratization and decentralization process has gradually recognized the community rights over natural

resources. However, policy implementation in favor of community forests has been delayed due to counterpressures from the influential capitalists engaged in logging and plantation activities. On the other hand, among NGOs working for community rights, few of them are capable of practical forest management techniques, not to mention marketing of forest products (Cahyat 2002). YDT, as well as its predecessor YDD, is one of the pioneering NGOs in these specialties, but still faces challenges in project planning, cost management, and biological and socioeconomic monitoring (Ames 1998, de Jong and Utama 1998). Some researchers argue that in future NGO-sponsored community-based forest management and tree planting may exist only on the periphery in isolated locations in West Kalimantan (Potter and Lee 1998). Other forms of forestry activities will displace traditional Dayak agriculture, such as industrial timber and pulp plantations and oil palm estates, because of: 1) the strong political and economic powers of timber and plantation companies, 2) the mosaic-like distribution of land tenure, and 3) the difficulty for individual smallholders in replicating new technologies without continuous external assistance. In 2004 YDT set out a larger-scale, five-year integrated rural development program in the Ketapan District. It was at the home of the former executive director Donatus Rantan and was sponsored by the European Union (EU). This program may serve as another critical test for forecasting the prospects of community-based sustainable forestry in Indonesia.

4. Conclusions

This author made visits to some Kalimantan NGOs other than the YDT and its related institutions discussed above. Visits were made to national-level NGOs in Java, active in the forestry and agricultural development sectors such as WALHI, Bina Desa Foundation (YBD), and the Indonesian Tropical Institute (LATIN). Through these visits this author gained the impression that many more citizens' initiatives in Indonesia were becoming interested in alternative and appropriate technologies for production, processing and marketing of forest products, besides political activity directed towards defending community rights over the forests. Some NGOs organized community-based producer cooperatives for technical extension and product marketing, and others opened forest-product outlets annexed to their offices. Bearing in mind the characteristics of specialty goods from the tropical forests, international fair-trade partnerships for certified timber and NTFPs will be crucial. They will be crucial to the realization of sustainable forest management and conservation projects, based on the empowerment of rural communities and their members.

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