

# **Expanding the Knowledge Base on Indigenous Practices through Student Action**

**Danielle Katrina M. Santos**

University of the Philippines Los Baños

## **I. Introduction**

The University of the Philippines Los Baños had been founded as UP College of Agriculture in 1909, and since then, through the important changes that occurred over the past centuries, UPLB has been closely identified to be one of the pioneering research institutions in the fields of agriculture, biotechnology, and environment. To cause the initiatives of the different distinctive fields to function towards sustainable development, the different colleges have thus reviewed and aligned academic and research programs with that of UPLB's niches. However, in the past 30 years, enrollment in agricultural courses has constantly declined from 51% of the total students enrolled in 1980 to 43% in 1995. In 2012, only 4.7% of the population of students in UPLB is enrolled in the course major (Coladilla as cited in Quismundo, 2012).

While the interface between student research and education is best exemplified in the studies done by students inside the classroom, extracurricular activities play an important role in relating agriculture to a greater segment of the society. This article will present the

current state of indigenous communities in the Philippines. It also aims to inform readers about the potential of student research and activism through volunteerism and public service in the preservation of indigenous culture and knowledge, to address the problems faced in the fields of food, agriculture, and environment. The information is based on selected studies done by Agriculture undergraduate and graduate students as well as undergraduate students in Development Communication majoring in Educational Communication.

## **II. Realities among Indigenous Communities and Local Culture**

One of the pressing problems faced today is poverty. Majority of the Philippine's population live in the rural areas, the seat of severe poverty. For the 80 per cent of the country's marginalized sector, agriculture is the primary source of income and more often than not, the only source of income. Moreover, illiteracy, unemployment, and incidence of poverty are roughly higher among indigenous peoples especially those living in the uplands, where indigenous communities are mostly found. These indigenous communities interact as a group and have established a lifestyle which had allowed them to preserve their own traditions and practices. However, this kind of lifestyle has also rendered them as the poorest of the poor (International Fund for Agricultural Development, 2009, p. 1).

According to the International Fund for Agricultural Development (2009), rural areas are out of pace with the rest of the society in terms of economic development due to the limited access to productive assets and business opportunities. As modern technology and

culture encroach upon traditional norms and practices, the indigenous people become more vulnerable resulting to worsening poverty and food insecurity.

According to Benzon-Cabanilla, indigenous practices are the mirrors of the local cultures to a specific environment. These practices have proved its effectiveness in conserving the environment and in preserving the traditional knowledge of indigenous communities (as cited in Bersales, 2011). Quitzon argued that indigenous practices were able to survive in spite of the many changes that have transpired, may it be natural calamities, man-made disasters, or technological breakthroughs (as cited in Bersales, 2011). However, these practices unique to the IP community have remained incarcerated into their own culture and continue to be unknown by the majority (Bersales, 2011).

Natural calamities are inevitable and so are the challenges faced by the community in terms of food, nutrition, and youth empowerment, livelihood for women, waste disposal, and maintenance of cleanliness among others. Development Communication students who had joined the immersion program of the university's flagship volunteer service program had a direct experience of these shortcomings especially when the Typhoon Haiyan had hit the Philippines. The calamity had not only taken away lives but also left a huge problem on food security and nutrition, livelihood, and rehabilitation of infrastructures (M.K. Soliven, personal communication, July 7, 2014).

### **III. An answer**

Development inextricably takes place at the expense of placing additional stress to our environment (Bañares, 2007). Thus, this is where going back to our grassroots becomes important. Correspondingly, our local cultures and traditions trace its roots from the indigenous people who are one part of grassroots level and are often marginalized (Bersales, 2011). As early inhabitants, these people have forged their own and distinct ways of living, keeping up, nurturing and protecting the environment through which their lives and way of living depend so much.

Xu, Ma, Tashi, Fu, Lu, and Melick argued that resources are sufficiently managed and the likelihood of preserving the environment is higher when traditional world views and beliefs are infused with indigenous knowledge (as cited in Bañares, 2007). However, with the advent of rapid economic expansion and introduction of infrastructures to boost the country's industry, additional stress has been grievously spared to our natural resources and the livelihood of the people (Bañares 2007). Crevello also claimed that development projects have failed due to forcibly employing indigenous groups to abandon their traditional practices in order to "save the forest" and recognize the need to assimilate them into modern society (as cited in Bañares, 2007).

Hence, exploring their practices can be demonstrated through information knowledge sharing. This will help not only students but also lawmakers and development communicators to have a grasp of what their culture is all about (Bersales, 2011). According to Banzon-Cabanilla, in order to encourage the indigenous groups to participate

in developmental projects, acknowledging their indigenous practices is a crucial step in establishing interactions among them (as cited in Bersales, 2011).

Unfortunately, indigenous knowledge is fading before our very eyes and now lies on the confines of the memories of old-age people who live in remote rural areas (Bañares, 2007). Unlike technologies which may come and go, indigenous knowledge has been proven effective through time and experience. Studying indigenous knowledge continuously will open up opportunities in finding the solutions to address the problems faced in agricultural farming that modern technology has failed to address (Bersales, 2011). Hence, the role of students in documenting these indigenous knowledge farming practices have been more significant now than ever to encourage more people to take part in it (Bañares, 2007). In the face of threats to local culture, these student researches impart the efforts of recording and preserving the ancestral wisdom before they completely dissolve with time and be diluted with mainstream and modern knowledge. In addition, these student researches can also benefit future research regarding the topic and eventually strengthen the pursuit of expanding the body of knowledge on Filipino culture respective to environmental conservation and enhancing the capacity of the local people toward ecological biodiversity (Bersales, 2011).

### **A. Expanded Professional Practice Option for UPLB Students**

As a response to the growing need to understand the interdisciplinary nature of agriculture, the academic curriculum of the Bachelor of Science in Agriculture (BSA) course at the University of the Philippines Los Baños was revised in 1997. It focused on the principle of balancing sustainable agriculture (SA) with biophysical, ecological, socio-cultural, and political dimensions of agriculture. The revision included the provision of additional professional practice options, that is, along with thesis research; the students are provided additional options that they can choose from which include major (farm) practice, research internship, extension and teaching, or agricultural entrepreneurship (Edaño and Zamora, 2009). This will enable students to have a better appreciation of their specializations by introducing them to several options. Likewise, they will even do better if their various interests are being accommodated. Nonetheless, the results of their researches, which they have thoroughly worked on, will be of great help in enriching the knowledge base on sustainable agriculture specifically involving farmer's practices and indigenous knowledge.

Zamora and Sumayao discussed that the incorporation of the principles of sustainable agriculture was initiated by professors in the same field, as early as 1989-1990. It was then only implemented in 1997 when the number of students who opted to major in Animal and Dairy Science had soared. The Office of the College Secretary of the College of Agriculture revealed that from 1989 to 2007, 41 % of the students graduated in the field of animal and dairy science, 27 % in horticulture, 13 % in agronomy, 9 % in plant pathology,

6 % in entomology, 4 % in soil science, and 1 % in agricultural extension (Fig. 1). In addition, majority of the students chose thesis option over major farm practice option which is chosen by 48 % of the students. On the other hand, research internship and teaching is the least popular among students with only 2 % percent (Fig. 2.) of the students mainly because of the limited availability of faculty members handling the course. The professional practice options were provided to revolutionize the theories and principles learned by students inside the classroom, which tend bring a mind set among students of the ideal conditions rather than exposing them and letting them discover among themselves a wider perspective of the realities in the farm (as cited in Edaño and Zamora, 2009).

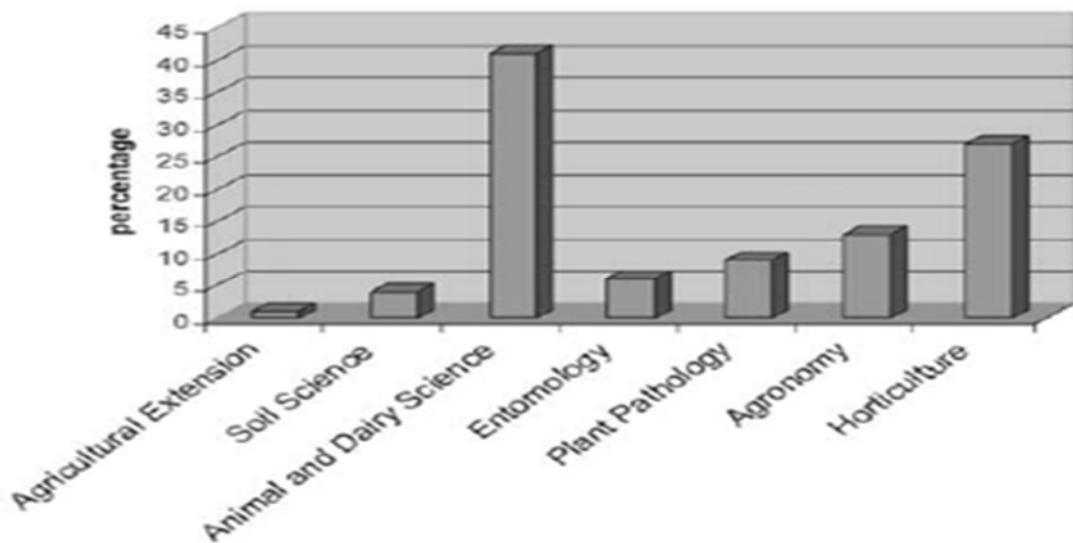


Fig. 1. Distribution of BSA students according to field of specialization, 1989-2007.

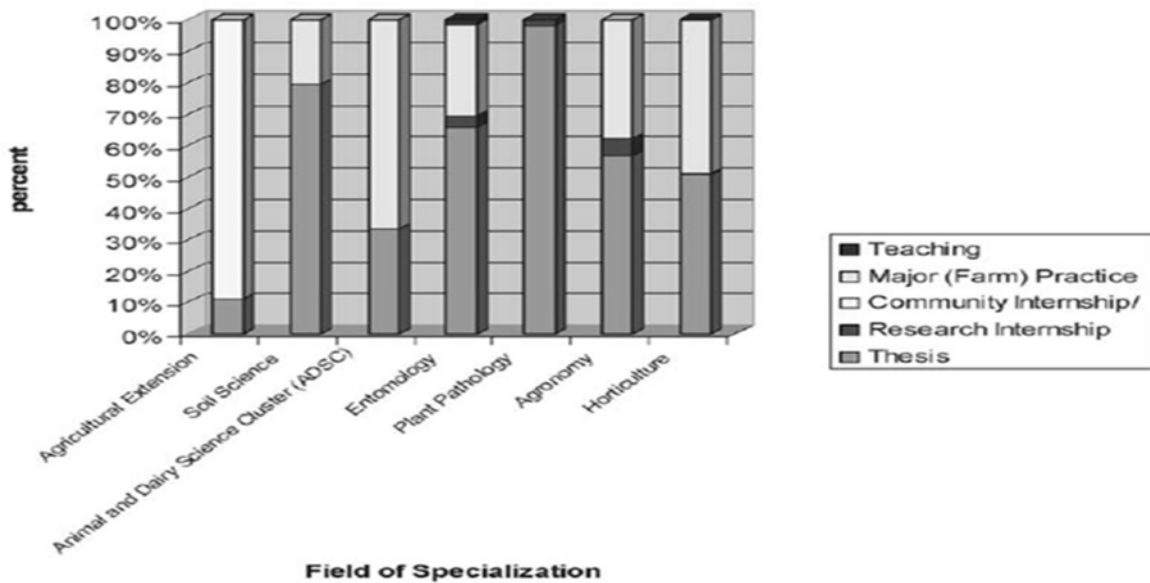


Fig. 2. Distribution of students according to major practice option, 1989-2007.

According to Edaño and Zamora (2009), the reason behind the upswing of students who opted to choose the major farm practice is due to the exposure and hands-on experience that they will be able to gain from it. Moreover, it is not just exposure in the field level, but immersions and exposure on the culture of the community as well. They will be able to develop their social skills in dealing with people from all walks of life. While there could have been a higher number of students that could have been recorded, professors had advised students to pursue the thesis option due to the limited number of farm practice placements and community internships available. Nonetheless, the thesis option offers to develop and hone the research skills of students to address the expanding job market for agriculture graduates. Correspondingly, the agricultural entrepreneurship option was also welcomed by students who wish to experience and be trained in agriculture related business. While it was evident that there were only few who chose to be employed in the academe as



teaching option garnered the least percentage of students, research internship, has become a growing option for students. This is mainly due to the improvement of research facilities and development of research programs offered at the university.

### **B. Public Service and Voluntary Work with Indigenous People**

Both undergraduate and graduate students in the crop science cluster of the College of Agriculture had conducted studies on various indigenous agricultural practices of the Molbog and Batak of Palawan (Fig. 3), Alangan Mangyan of Mindoro Oriental (Fig. 4) Tulgao and Imangali of Kalinga (Fig. 5), and Manuvu of Davao (Fig. 6) among others (Edaño and Zamora, 2009). Consequently, students had become more knowledgeable about the culture of these IPs through the studies they had conducted in their immersions. In order for them to communicate this knowledge base to a greater number of people, these studies had documented the sustainable practices and biodiversity conservation methods of the indigenous people.



**Photo by: Vanzuela, 2005**

**Fig. 3. Use of the common dibble planting method by Molbog and Batak of Palawan that minimizes soil erosion.**



**Photo by: de Jesus, 2001**

Fig. 4. The pud-pu-sit, a handmade bamboo sprayer that sprays pounded sunflower leaves to control insects.



**Photo by: Hilario, 2000**

Fig. 5. Cut logs are placed by Tulgao and Imangali of Kalinga along boundaries to control erosion, and crops are planted across the slope to minimize runoff.



Photos by: de Guzman, 2000

Fig. 6. A hut used by the Manuvu in Davao to store seeds.

Likewise, the College of Development Communication had developed the ethnovideography research design to document and analyze the indigenous knowledge and practices of the community relative to environmental conservation (Guerrero as cited in Flor, 1997). The use of this method was launched during a research study conducted by Development Communication graduate students on the significance of indigenous knowledge and how it contributes to sustainable environmental management plan to preserve Caramoan National Park in Bicol (Bañares, 2007).

In the same manner, the university has also established a flagship volunteer service program under the “UPLB Ugnayan ng Pahinungod”. It aims to utilize the university’s human resources toward public service and in the process, bring about the spirit of selflessness in rendering service (“Volunteerism as a Way of Life,” 2010, para. 4). Under the “Ugnayan ng Pahinungod” is the Immersion Service Program in Calait Island, Busuanga, Palawan. The activity is usually publicized but due to the decreasing pool of volunteers, any student, faculty, staff, or alumni of UPLB can participate. The participants submit application forms which will be then assessed by the staff. There is also an

interview process for some participants. If accepted, they have to comply with the requirements (cedula, waiver, insurance, and a medical certificate from University Health Service). M.K. Soliven claimed that it aims to invest on the students, to reflect on the different needs of different communities. Due to the firsthand experience gained by the students, they are able to make use of their expertise in their respective fields. In addition, deployment of students on the sites was not only based on the needs of the community but also on the expertise of the students. The first immersion activities undertaken were leadership training and a documentation of the island's history. Having deployed in the site for a purpose, the leadership program has paved way for youth empowerment while the documentation had shed some light on the recognition of the site's rich history. The second immersion activity dealt with capacity-building specifically among the members of SKKC or Samahan ng Katutubong Kabataan ng Calauit. The immersionists had come up with a service geared on both the economical and environmental needs of the community (personal communication, July 7, 2014).

### **C. Student Research Interface**

Most of the research done by students fall on the following categories: resource conservation, socio-cultural, economic and political viability of practices, integrated or systems research, and conversion from conventional to sustainable agriculture (Edaño and Zamora, 2009). Local communities had established its way of life through the resources nature offered them and have been attached to natural world ever since. The reason behind their knowledge of nature is due to the fact that their lives are interwoven and shaped by

nature itself (Wang as cited in Bañares, 2007). On that account, student researches and documentation only prove to be useful, especially in the academe. As a matter of fact, studies on resource conservation which deals with indigenous peoples and traditional landraces are being utilized in addressing threats brought about by unsustainable development interventions on rich genetic resources, maintained by the indigenous communities. These genetic resources are not just part of their culture but also their means of survival given the environmental condition they had to contend with (Edaño and Zamora, 2009).

In the same way, the results of the research studies conducted by students are also being used in classroom discussions and field trips among BSA students. During field trips, students form multidisciplinary teams in the evaluation of sustainable production systems and formulate recommendations that can benefit the community. In addition, it encourages participatory approach among the stakeholders. Active involvement among stakeholders empowers the community to share their experiences and assessment of their condition. Lastly, having learned about sustainable agriculture in some of their courses, students will be able to facilitate communication of SA information to farmers (Edaño and Zamora, 2009).

#### **IV. Conclusion and recommendation**

Indeed, student researches had paved way for the enrichment of our knowledge not only about sustainable agriculture but also about local culture and traditional knowledge. These researches have begun to create a whole lot new understanding of agriculture among

students. In addition, the extracurricular activities through volunteerism, engaged by students had promoted a reconnection between them and the various aspects of studying agriculture.

Since studying about sustainable agriculture is culture- and location-specific, researchers could learn a lot from the empirical and accumulated wisdom of the indigenous people who had thrived for centuries. In order for indigenous knowledge to prosper and flourish through time, it is important to teach the different farming practices to the younger generation more intensively and if possible, record these unique indigenous farming practices by writing them in books to ensure that these are preserved. The younger generation plays an important role in the preservation and continuation of these indigenous farming practices. It is recommended that they take part in the preservation of these farming practices by engaging in it and recording them through different knowledge storing activities that they have learned. As for the local government units, it is recommended that that policies and interventions be highly sensitive of the beliefs and practices of the indigenous community such as ancestral domain claims be preserved as much as possible. In addition, a more open communication channel between government officials and tribal leaders is also recommended to ensure the cooperation of both sides. Lastly, recording their farming practices is also important in their culture's preservation. Thus, it is highly recommended that the government find means to record these activities through books and videos among others to preserve these indigenous practices before they fade away with time.

## Reference:

- Agillon, A.B. (2007). *Traditional knowledge in the Philippines*. Retrieved June 16, 2014 from [http://www.techmonitor.net/tm/images/7/70/07mar\\_apr\\_sf6.pdf](http://www.techmonitor.net/tm/images/7/70/07mar_apr_sf6.pdf)
- Bañares, L.R. (2007). *Exploring Bicol's Secret Frontier: Indigenous Knowledge in Environmental Conservation*. Unpublished master's thesis, University of the Philippines Los Baños, Los Baños, Philippines.
- Bersales, J.H.S. (2011). *Communicating Indigenous Farming Practices: The Case of Subanen Tribes in Zamboanga del Sur*. Unpublished undergraduate thesis, University of the Philippines Los Baños, Los Baños, Philippines.
- Edaño, M.L.S. & Zamora, O.B. (2009). Contribution of Student Research to the Accumulation of Knowledge on Farmer's Practices, Indigenous Knowledge and Conversion Process to Sustainable Agriculture at the UPLB College of Agriculture. *Journal of Developments in Sustainable Agriculture*, 4 (57-63), 57-63.
- Flor, A.G. (2006). Transformational Communication. DEVC204 Course Guide and Resource Kit. UP Open University, Los Banos, Laguna.
- International Fund for Agricultural Development. (2009). *Enabling Poor Rural People to Overcome Poverty in the Philippines*. Retrieved June 17, 2014 from <http://www.ifad.org/operations/projects/regions/pi/factsheets/ph.pdf>
- Quismundo, T.V. (2012, July 4). Enrollment in Agriculture at UPLB Sharply Declines. *Philippine Daily Inquirer*. Retrieved from <http://newsinfo.inquirer.net/223047/enrollment-in-agriculture-at-uplb-sharply-declines>
- The State of Indigenous Peoples in the Philippines. (2009). Retrieved June 25, 2014 from <http://capiznon.files.wordpress.com/2009/10/the-state-of-ip-in-the-philippines.pdf>
- University description. University of the Philippines Los Baños School website: <http://ovcre.uplb.edu.ph>
- Villegas-Pangga, G. (2013). *Indigenous Knowledge Systems and Organic Farming Technologies: Farmers' Access to Community Technological Learning*. Retrieved June 16, 2014 from [http://www.satnetasia.org/public/Policy\\_Dialogue\\_2013/papers/9\\_Indigenous\\_knowledge\\_systems+organic\\_farming\\_tech-University\\_Philippines\\_LosBanos\\_paper.pdf](http://www.satnetasia.org/public/Policy_Dialogue_2013/papers/9_Indigenous_knowledge_systems+organic_farming_tech-University_Philippines_LosBanos_paper.pdf)