

The vanishing indigenous rice varieties of mountain communities in Southern Batangas, Luzon Island, Philippines:

Reflection of cultural biodiversity enriched by the traditional ecological knowledge

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Against the backdrop of the '2008 national rice crisis' in the Philippines, we have seen several families in the rural mountain of Lobo, southern Batangas - some 170 kilometres south of Manila, preparing themselves for "pagbabakal" - the summer ritual of dibbling and sowing mountain rice. They are hoping for the first monsoon to fall over the mountains by June. We conducted an exploratory study to highlight the traditional ecological knowledge associated with the temporal rice-based swidden but consequently, we uncovered the existing and extinct indigenous rice elements.



Harvesting indigenous rice, Southern Batangas, Philippines. Photo M Anacleto

Indigenous rice varieties based on folk taxonomy

We studied a total of 38 indigenous rice varieties (IRVs) known by the Tagalog (Philippine people living by the rivers). The 19 IRVs currently cultivated consist of 11 'tangi' (non-glutinous rice varieties) such as inabaka, inuway, kalibong-gulisan, kalibong-pula, kalibong-puti, kamuros (also known as margarin), minita, pinilik, tangi, tapukoy and tinalahib while eight varieties are malagkit (glutinous), namely: kinumbit, inuwak, nagkayat, gininto, sinantol, tsina, 'everlasting' and pirurutong. Another 19 IRVs were without samples since they have not been cultivated in the last 50 years due to the inability of shifting cultivators in preserving them, hence are locally extinct. (These include: kinabibi, kinanda, tabuno, kinastanyo, sinampan, pinursige, sinaba, initlog-dalag, kinalapan, sinulyap, pulupot, kalibong-lawlaw, buliro, nilalaki, binabae, kinalabau, minantika, kinugon and binuro.) IRVs were assessed from 12 sitios (subvillages) in 10 mountain villages (200 - 800 m.asl) in Southern Batangas where kaingin (swidden agriculture) is a common practice (Caringal and Panganiban, 2008). Data for each sample was produced with the assistance of

community elders and key informants (KIs) who in effect, control these varieties.



Emergence of 'tinalahib' (one of the indigenous rice varieties) two weeks after the monsoons in Southern Batangas. Photo M Anacleto

Faunal knowledge is reflected in four varieties such as *initlog-dalag* (egg of mudfish), *inuwak* (a large-billed crow), *kinabibi* (clams and seashells) and *kinalabau* (large ruminant) and *kinastanyo* (horse). Floristic knowledge has been accorded to *inabaka*, *inuway*, *kinugon* and *tinalahib* as they are semblance of herbaceous *abaca* (*Musa textilis*), rattan or climbing palm (*Calamus* spp.), *cogon* (*Imperata cylindrica*) and *talahib* (*Saccharum spontaneum*) in that particular order. In the case of *inabaka*, it has whitish *sungot* (awn) that looks like fine fibres of *abaca*. For *inuway*, it could be in the bending property of the panicle or the rice node. For *tinalahib* it could be on the much longer culm than *cogon*; *pirurutong* (purple rice) according to Sinohin and Borromeo (2002) which is also similar to *yam* (*Dioscorea alata*); for *sinaba*, probably on herbaceous banana (*Musa* spp.) and to *sinantol* for the yellowish to reddish exocarp of meliaceous *santol* (*Sandoricum koetjapi*). *Kalibo* which literally means 'a thousand' with variants *gulisan* (lined), *pula*(red), *puti*(white), *lawlaw* (loose) is based mainly on visual attributes but there is no established connection of the said varieties from *Kalibo* town in *Aklan* Island as much as with glutinous *tsina* from the Peoples Republic of China (PROC). Similarly for *kinalapan*, there is no information if the said variety originated from *Calapan* - a city on *Oriental Mindoro* Island about 27 kilometres west of *Southern Batangas*.



A mountain couple harvesting 'inabaka' (awned rice) subdued by tropical storm, Southern Batangas, Philippines. Photo M Anacleto

Local knowledge about the nature of food is reflected in *margarin* or *kamuros* (yellowish or aromatic lard), *minantika* (cooking oil) and *nagkayat* (oozing, flowing, watery). Other observable features in the immediate environment include *kinanda* (small or short), *kinumbit* (fruit aggregation), *minita* (tiny or small), and *pulupot* (plant tendrils), *tabuno* (big), *tapukoy* (dwarf) and *tangi* (true rice variety). Social knowledge has been accorded to *pinursige* (striving, persevering), *sinulyap* (looking back), *sinampan* (walking upstairs, storing), *binuro* (name of fellow farmer) and 'everlasting' or immortal while *binabae* and *nilalaki* are notions of feminism and masculinity or could be seen as an image of having articulated eyelashes as in *pinilik*.

Knowledge-belief complex

Believed to enhance bountiful IRV harvests are native chicken eggs, *bunga* (*Areca catechu*), *asin* (salt), *makabuhay* (bitter vine), *luya* (wild ginger) and *salay* (lemon grass). They are buried around the *taywanak* which is an improvised bamboo cross pegged at the middle of the swidden. This activity is known as

pamiminhian (seeding) and is performed by one or two elderly farmers usually in the morning, hours before pagbabakal (sowing). Taywanak is believed to reproduce rapidly compared to other bamboo species; hence, they also believe that the chosen IRV sown will produce more uhay (panicles) as in the way bamboo reproduces rhizomes (taywanak literally means having many children). The cross is believed to repel evil elements such as storms, droughts and maninira (pest insects). The namiminhian (seeder) will close his eyes and prays the Tagalog lines from "Our Father": "Our Father in heaven hallowed be your name, your kingdom come, your will be done as it is in heaven, give us today our daily bread and forgive us our death as well also have forgiven our debtors and lead us not into temptation but deliver us from the evil one". Amen).

Pagkuha (rapture) has been a practice in IRV production. The harvest day is not announced by the field owner even if other farmers have seen that the IRVs are ready to be harvested. One or two days before actual harvest, the owner will go to his field to locate the cross that was pegged out during the sowing day. He will pray at the middle of the rice field: "Our Father..." and when he arrived on the line "give us today our daily bread ", pause and with eyes closed, his right hand has to grasp the panicles three times and expressively pronounce "Anong bigat, punung-puno!" (How heavily filled!). However much he gets he has to bring home and place in the takuyan (bamboo basket), bundled or wrapped with white cloth and he will hang the panicle from the ceiling. Then, early the following day, he will inform the neighbourhood that the IRVs can be harvested, rain or shine.

Pamamago (silent dinner) is the moment when the family of the harvest owner or the co- harvesters prepare the meal after sun-drying and dehulling of the grains. This is the family's 'silent mealtime' with aromatic rice and tinola (vegetable chicken), to the exclusion of neighbours or any passers-by. The silent mode is suggestive of their internalisation of the harvests as contemplated during pamiminhian when Our Father is worshipped in the belief that the aromatic rice on their table is the answer to their prayer: "give us today our daily bread...". When neighbours or by-passers are not invited to join the meal, this does not mean selfishness but suggests only the family's tradition of momentary reunion to enjoy (not in any festive or showy mode) their special rice.

It is hoped to provide our home university and other agencies with a the baseline for more rigorous and ecologically sound and culturally compatible rice research and development (RR&D) in mountain areas. Despite the global and national speculation on a rice crisis, there are still hopeful signs at a local level for diverse native rice species and the socio-cultural and ecological dimensions associated with the production of indigenous rice varieties preserved by marginalised mountain communities.

References

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