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# Community Participation on Rural Development; Importance of High land cultivation, Chena for Prevalence of Traditional Crop Varieties and Rural Sustainability

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Abstract—Since ancient time, cultivation is emerged as a peculiar culture in Sri Lanka." Chena" that is the unique high land cultivation method in Sri Lanka, represents a vital role on behalf of in-situ conservation of traditional crop varieties. Beside, Chena is one of the iconic symbols of rural sustainability. For the study participatory observations, semi structured interviews, group discussions were carried out in this area. Here we observed, many rare traditional varieties in rice, vegetables, grains, yams, fruits, pulses, leaf vegetables and medicinal herbs are conserved in Chena cultivation through both species level and genetic level. And also they preserve the propagation unit, seed among their small communities as a genetic resource. Then they use these protected seed as the foundation seed for the next season. Chena cultivation has been assimilated to the Sinhalese rural life pattern via the culture and socio economics. Rituals, customs, spiritual beliefs and cultural practices related to Chena persist among them. Most important socio economic role is it mainly concentrates on the rural food security without influence of market oriented intentions. This role is fortified by climate changing endurance capabilities of crops in high land cultivation. Hence, ancient people depended completely on Chena crops when their staple food, rice production is in climate challenges. And the high level of nutrients, caloric energy and deliciousness ensure a healthy life of people. Further Chena's traditional varieties are feasible in providing a substantial harvest excluding chemical treatments. This cultivation system demonstrates that the essentiality of community participation for conserve the ethnobotanical values, resources and knowledge, and it servers for their own sustainability. But this high land cultivation is in a critical stage in present Sri Lanka. Some governing decisions and agricultural policy making have enervated this traditional cultivation event. And modern corporatocracy jeopardizes the value of traditional crops varieties by promoting gene modification. Further proposed seed act in Sri Lanka (2014) has been badly oriented to violate community seed right. These all make severe effects on Chena cultivation. Here we urge the attention of relevant authorities for reconsider this livelihood practice and make better implementations in near future. These implementations should come up with an integrated model for development, protect the livelihoods and agro diversity. It helps to ensure the cultivators' rights, social justice and rural sustainability.

Keywords— Community participation, Chena, Traditional crops, Sustainability

### INTRODUCTION

According to the legends, the provenance of Sinhalese Chena (Hena in Sinhala) cultivation is extended towards around Lord Buddha Deepankara's era which it's timing is uncertain. "Rata Yekuma" which is a Sinhalese traditional low country ritual reveals this chronicle as seven group of queens, Riddi Bisawu have cultivated a cotton Chena in Sri Lanka to consecrate a sacred robe for Lord Buddha. Chena descends since very old time as a native cultivation mode; it emancipated the people from famines (Brohier 2007). And this highland cultivation trait is unique to Sri Lanka through a cultural consanguinity (Gunasekara 2009). Moreover Chena cultivation is the most important

subsistence agricultural system mostly in the dry zone, which has long well-established traditions, resulted in a diversity of crops, and has produced a practical knowledge of farming methods that has been sustainable for many centuries (Epitawatte 1998). This practical knowledge which is confederated with the community participation on Chena cultivation, contributes for rural sustainability as well as the prevalence of traditional crop varieties. Hence local community have centralized the traditional varieties' in-situ conservation to the Chena via both species and genetic levels.

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Our study was carried out in Sri Thissapura area in Sri Lanka. For the study participatory observations, semi structured interviews, group discussions were carried out in this area during 2013-2014. According to our observation, In Chena cultivation, people start the bush clearing and other basic land preparations simultaneously to very small scaled rain called " Nikini Paluwa" in August. Often they are responsible for avoid from destruct the large trees in land preparation. Thence in the mid September, many rare traditional varieties in rice, vegetables, grains, yams, fruits, pulses, leaf vegetables and medicinal herbs are cultivated. Here they concern on the land and space management for maximize the productivity of their cultivation. Hence they utilize every and each unit of the space by having an appropriate crop. These crops are consisted mainly with indigenous varieties which considered as rich in nutrients, medicinal value and deliciousness. Further foundation seeds of these high quality verities are circulated only among a handful of rural community and the participatory competency of Chena cultivation is limited to this group as well. And Chena plays a vital role on rural food security without influence of market oriented intentions in this area. Traditional finger millet varieties, maize, yam varieties and vegetables stabilize this food security mainly. This role is fortified by climate change endurance capabilities of traditional crop varieties. Therefore these Chena crops supplement Sinhalese staple food rice in critical occasions. Besides these traditional varieties are cultivated excluding any chemical treatment or external fertilizers.

As we observed study, Chena cultivation has been assimilated to the Sinhalese rural life pattern via the culture and socio economics. Rituals, customs, spiritual beliefs and cultural practices related to Chena persist among them. And they follow the spiritual back bone as " cultivation is for the wellbeing of all living beings". Meanwhile they execute the astrology, environmental perception and faith on local gods in their Chena cultivation; as such all these based on the fundamental values of Buddhism. Thence we observed a disciplinary and non violent agricultural practice for all

# RESULTS AND DISCUSSIONS

Participation is an essential part of human growth; that is the development of self confidence, pride, initiative, creating responsibilities and co-operations. development allows a process whereby people learn to take charge for their own lives and find solution to their own problems; such participation by people builds up the development which guides towards essence of sustainability (Burkey, 1993). This cultivation system demonstrates that the essentiality of community participation at ground level agricultural paradigm to achieve their own sustainability while conserving the ethnobotanical values, traditional crop verities and traditional knowledge. Moreover it ensures the health, economics and rural food security. Nevertheless this high land cultivation is in a critical stage in present Sri Lanka. Some governing decisions and agricultural policy making have enervated this traditional cultivation event by

Journal online http://journal.bakrie.ac.id/index.php/APJSAFE considering it as a destructive slash burn method. And the Chena cultivators struggle against the governmental bodies to regain the cultivation lands' tenure. In the other hand, modern corporatocracy jeopardizes the value of traditional Chena crop varieties by promoting gene modification and crops which provide excess harvest under artificially controlled conditions. Further this corporatocracy severely intercedes for traditional seeds circulation among the community. And proposed seed act in Sri Lanka (2014) has been badly oriented to violate the community seed right by appoint the director general of agriculture as fully responsible for protection and conservation of genetic resources of both traditional and non-traditional native seeds and plants of agricultural significance. Community level Chena's seed right would be trembled due this kind of regulations.

According to modern development concepts, people are centralized in the sustainable development. Moreover, the three pillars including economic growth, development and environmental protection lift up sustainable development shelter. Chena is an iconic symbol of indigenous people's agro- cultural norms and practices since ancient time. Therefore the insurance of prevalence of Chena would be very important to ensure the social development pillar. And it would responsible for social justice and freedom of possess the cultural sovereignty. Finally this cultivation method is distinguished as an integrated model of agriculture, food security, culture and rural development.

### CONCLUSIONS

Here we suggest to pay the close attention by relevant authorities for reconsider this livelihood practice and make better implementations in near future. And to monitor this cultivation practice under a systematic way with opinions of a community centralized body. All these implementations should come up with an integrated model for development, protect the livelihoods and agro diversity. It helps to ensure the cultivators' rights, social justice, environment and rural sustainability.

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