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Guest Editorial

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Food –that sustains us- has transcended from the tables of families to big topic in scholarly debates, non-governmental organizations programs, government policies and funding priorities of International donors. The increasing focus on food is also seen in the changing dietary preferences among younger health-conscious and nutrition-savvy generations and urban-based niche markets generating newer demands and opportunities to embrace traditional-food based recipes. The rhetoric of food and medicine as commonly expressed as ‘Food for health and medicine for sick people’ is now being rediscovered with ‘food as medicine’ – the commonly held wisdom and experiences of many Indigenous and local communities – in academia, among donors and many community-based organizations. . The global-level case studies FAO (Kuhnlein, Erasmus and Spigelski, 2009; FAO, 2013) of traditional foods and Indigenous community-based food systems have aptly established the nutritional, health, economic, educational, environmental and cultural benefits. The food-related discourses have been well echoed in policies, programs and publications on food security, food sovereignty and in recent times, Indigenous food sovereignty. The long-standing tensions and contested debates between the supporters of food security (seen as a neoliberal focus favoring supply side production) and practitioners of food sovereignty continue to compete amidst continued focus on food from all sectors and all walks of lives. International scholars such as Pimbert (2009) propose transformative concept of ‘autonomous food systems’ – a just and democratic food systems in which local community or a nation defines its own needs and limits and sets the course of its own food production and consumption. The transformative scope and hopes of autonomous food systems resonates very well with food sovereignty- a concept inspired from and as a movement with an explicit social justice and human rights commitment which empower people to grow, consume and distribute their own foods (Vi’á Campesina 1996). Food sovereignty, challenged the dominant concept and intentions of food security, emerged as a ‘big-tent’ and multi-faceted concept with complex practical implications (Patel, 2009) To complicate the dialogue, Indigenous food sovereignty has recently registered its presence in support of food as a metaphor for Indigenous self-determination and reclamation of cultural identity for Indigenous communities from Canada (Morrison, 2012). The food sovereignty and Indigenous food sovereignty initiatives have been recently analyzed to reinforce their position as social justice and peasants movements (Kamal and Thompson, 2013) which counteracts the so-called top-down supply-driven approaches promoted by the donor-driven and Government supported programs of food security.

The confusion between food security and food sovereignty still exists among academia and practitioners. In a recent international conference held the Yale University, papers were invited under a theme of ‘Food Sovereignty: A Critical Dialogue’ (see,

<http://www.yale.edu/agrarianstudies/foodsovereignty/>. One of the presenter and well-recognized scholar from Canada, Dr. Shirley Thompson, noted “The Yale conference was really about trade at the national and global level and did not provide much focus on the community level, peasant or Indigenous food sovereignty’ (Thompson, Personal Communication, Dec 2014). Some of the well-recognized Journals from other disciplines also started to reflect the tensions between food security and food sovereignty. ‘Dialogues of Human Geography’ (Volume 4, Issue 2, 2014) has most recently published a special issue using multiple vantage points to understand food security and food sovereignty and reengage us in these debates. Murphy (2014) in this special issue suggests a rapprochement between these seemingly opposite terms in the spirit of feeding the future world. Someone with a pragmatist theoretical orientation like me welcome such reconciliation in hope to generate practical strategies based on local perspectives in order to meet the food and nutritional needs in a changing world. While drawing on an earlier definition of community food security by Hamm and Bellows (2003:37) and in the spirit of bridging food security and sovereignty, we define, community-based food security as local communities of a given region defining their own issues, priorities and needs for achieving and maintaining food security (both quality and quantity) and then using their own local knowledges, practices, and values (including belief systems) alongside scientific approaches in order to reflect, engage and govern the development of action which leads to achieving their own collective food security goals. The concept of ‘community’ is therefore central to any discourses and terminologies related to food. Community as a concept has always been contested with multiple meanings and dimensions (Hillery, 1955) and therefore, in community food security, community may be viewed as capable and empowered local inhabitants who can self-determine their own interest, needs, and priorities and creatively combine their Indigenous knowledges, perspectives and ways of knowing with science and formal knowledge systems to meet theirs and future generation’s collective goals of securing adequate and nutritious foods. This is echoed by the seven research contributions of this issue.

The first three papers, reflect community perspectives and issues on the dimensions of production, consumption and sustenance of local food systems in Nepal. Naomi and Co-authors explored dietary diversity through a participatory case-study in the mountainous areas of Jumla, highlighted access and availability as major barriers to dietary diversity. In this study, local communities expressed that triggers in access and availability caused shifts in consumption of local and traditional foods, causing newly acquired life styles. The production and consumption for the local traditional food (including traditional rice variety *Jumla Marsi*) are valued (by local communities and local community-based organizations) but also threatened due to a variety of local, regional and international factors reported by the Authors. The contributions of traditional foods and its consumption in community food security is reinforced by community voices and can be strengthened through (re)acquisition of taste for diversity of food including their own local traditional foods.

Like many countries of Global South, in Nepal too, one of the factors that is changing the context and meaning of community food security is migration (mostly by the male members) from rural regions to urban areas of Nepal and also to international places. Rural women farmers thus become prominent actors in ensuring community food security in recent times as reflected in the stats and facts presented in the second paper by Pudasaini and co-authors from LIBIRD (Local Initiatives for Biodiversity, Research and Development). *Ghar Bagaincha*- a community-based traditional home garden system with multiple species of medicinal and food plants (mainly native vegetables and fruits) and cattle primarily to meet family food and nutritional needs is examined through a survey of 769 households from 23

villages of 10 different districts in Nepal. This large survey demonstrates compelling evidence in support of the social (women empowerment), economic (overall increase in household income) and environmental (climate change adaptation) benefits of home gardens in women-dominated (due to high out-migration of male community members) small-scale farmers food systems in countries like Nepal. As shown, these home gardens are indeed serving as very valuable small community-crafted institutions and micro-habitats for production and consumption diversity of food and medicinal plants as per the wishes and interests of local women farmers and thus hold great promise for community food security. Once used as subsistence food production systems to feed own families such home-gardens, however, are now also being seen as an emerging avenue for commercial production by LIBIRD researchers for many small-scale women farmers in Nepal, which needs to be further examined from social-ecological resilience perspectives. In addition to Home gardens, community gardens as local institutional innovations for community food security were used by many communities in the past, including Indigenous communities from developing countries like Canada not just as food production systems but also as a means to cultural identity and community spirit of sharing (Beaudin et al 2013; and suggested as long-term approach to building skills, knowledge and values for community food security (Northern Healthy Food Initiative, Government of Manitoba, 2014; FAO and CINE, 2013; Council of Canadian Academies, 2014).

The sustainability of Community gardens or household gardens depend largely on the availability and use of seeds farmers or community levels. Our survival and nurturance must be credited to the generations of from generations seeds carry both genetic and cultural memory (Nazarea, 2006) - an essential ingredient for building and enhancing resilience of sustainable food systems of the local communities in various parts of the world. The seeds are often shared and exchanged among community members along with food many culturally-shared practices and beliefs. Such informal seed-sharing networks, however are least recognized and empowered and therefore are also on decline along with the seeds of many traditional food crops.

Through empirical and systematic social network analysis and tools in the Kaski district from western mid-hills of Nepal, the fourth paper by Gartaula and colleagues, shows that though weakened, an informal network of 95 farmers is still engaged in sharing and exchange of the seeds of finger millets, maize and rice. Many nodal farmers played a vital role not only in seed exchange but also contributing to conserve these seeds and cultural memory, which is now facing challenges due to variety of factors including preference to save seeds at the homes by network farmers, declining varietal diversity and most importantly local youth's loss of interest in agriculture and preference for wage Jobs than agriculture. The local (in-situ) conservation of traditional crops, cultural memory and informal institutions that sustain seed-diversity and cultural memory are valued in securing community food security at the local level but needs recognition and perhaps re-vitalization. Many place-based and self-organized native seed conservation initiatives and alliances such as RAFT (Renewing America's Food Seed Traditions, <http://www.albc-usa.org/RAFT/>) have recently emerged by well-known scholars like Gary Nabhan and gaining popularity in North America to revitalize the valuable food and cultural heritage essential to feed and nurture future generations.

The next three papers from India, reflect, that local leadership and knowledge systems are capable to interact with science and formal institutions and promote community food security. Dyck's paper, explore the contributions of knowledge network often initiated by the

opinion leaders in dissemination of grassroots innovations that could strengthen community food security. As established by Gartaula's paper from Nepal, Dyck's in-depth empirical research emphasize that local leadership is very critical in inspiring, developing and sustaining such self-organized informal networks who can promote horizontal (within or across communities) diffusion of sustainable agricultural innovations. These informal networks are very important actors in building bridges with formal scientific and research institutions and non-governmental organizations to generate social learning for sustainable food systems.

Many traditional crops are regaining research and policy attention, albeit on smaller scale, in South Asia. The local communities are cultural carriers and custodians of traditional foods across many parts of the World. The research paper from Mishra and colleagues from the M.S. Swaminathan Research Foundation in India documents the Indigenous food systems of three tribal communities (Bhumia, Paroj and Penthia) from 26 villages of Odisha, India using a house-hold survey in addition to other multiple methods in order to measure food habits and consumption patterns. This study indicates that consumption in terms of dietary diversity is very high in all 15 food groups and notably Bhumia Indigenous communities reported to use 115 diverse food items. The nutrient intake, though varies among three study communities, found to be close to recommended dietary intake (RDI) values. In contrast to an earlier paper by Happychuk and co-researchers from Nepal, Indigenous communities do not have issues of access and availability in meeting their food needs, however, the availability of modern processed foods through markets and government schemes of public distribution systems led to increased use of refined sugar, oil and rice, which changed the consumption of traditional-food based recipes and cooking methods. Mishra and co-workers' paper also present some of the traditional recipes still used by these communities and underscores its significance in maintaining food and nutritional security in Indigenous communities. The Indigenous knowledges associated with traditional foods and its recipes should be organically transmitted in the younger generations order to retain the cultural memory. Through advent of policies and market, cultural memory may add new knowledges and insights keeping the nutrient-intake and core community values (such as sharing foods) intact. In the Revitalization of Small Millets project recently concluded in South Asia, recipe contests were used to recognize and renew the traditional recipes based on millets and were surprised by the richness of traditional knowledges demonstrated by study communities in South Asia- in many cases women farmers (Karthikeyan and Palani swamy, 2013; Shukla, 2009). While such community-based approaches can promote the value of traditional-food based recipes, understanding and enhancing the ways of organic intergenerational transmission to strengthen the cultural memory and encourage consumption of traditional foods among younger generations are emerging as important areas of community food security interventions and research.

The third paper from India by Ragupathy and co- researchers echoes the value of Indigenous knowledges of farmers using a DNA bar-coding approach in South Asia. The detailed taxonomic knowledge and understanding of farmers on 18 small millets land races (using 50 different morphological characters and choosing 18 different agricultural traits), and the use of these land races following the diachronic wisdom of habitat-adaptation and climate-compliance, portrays the significance and potential of ethnoecological knowledges of communities in future community food security and conservation initiatives. The wisdom of communities in selection of various variability-versatile varieties (in this case drought-tolerance) of small millets is worth mentioning. In many sub-tropical communities of Global South, where drought is a recurrent occurrence, this and many other farming communities

have developed similar systematic Indigenous genetics knowledges in selection and adaptation of place-based traditional crop cultivars of small millets. The differential perception and preferences of men (mostly utilitarian reasons) and women (mostly spiritual and family well-being reasons) in choosing and using local land races of millets illuminates the gendered nature of Indigenous knowledges, when it comes to selection of traits when feeding families. This paper clearly demonstrates how scientific tools such as DNA barcoding can work alongside, and synergistically with Indigenous knowledges to enrich our overall understanding of contributions of traditional foods. The next step is to build on preferences and ingenuity of local communities in participatory breeding programs and policies of crop improvements.

Should the nature of and strategies for community food security differ in developed countries? A response to this question may be found in the three research papers from Canada. The research commentary by Cidro and Marten is a research commentary focussing on ensuring Indigenous food securities in cities through cultivating food skills. This paper, focuses on urban Indigenous population in Winnipeg (a city with highest Indigenous population in Canada) many of which are youth who lack the understanding and skills of their own cultural foods viz. hunting, trapping, fishing, growing, and gathering. Cultural foods for these groups are Indigenous foods- many of which are forgotten foods. The paper braves the idea of reviving the skills of production and consumption of cultural foods even in urban context within the legal and civic complexities of urban development. The role of civil society and non-governmental organizations in urban areas is considered critical in building these food skills for community food security. What is also important is to learn about and from is the cultural food skill-sets of immigrant and refugee people in cities like Winnipeg, where many people who may be originally Indigenous (in their countries of origin or birth) but officially not Indigenous from the Canadian context. Cities like Winnipeg thus weaves a multicultural tapestry of food-scape and resulting into multifaceted versions of community food security with cultural foods still being at the core.

The next two research papers from Canada speak to the value of cultural foods more so from an Indigenous perspective. The paper by Bolton and Davidson-hunt explores Anishinaabeg Perspectives of traditional fishing practices of Iskatewizaageg an Indigenous community from the Shoal Lake First Nations of Ontario, Canada. This paper achieves two purposes : i) it demonstrates a new direction of examining community food security using well-being as a competing theoretical and analytical framework' and ii) it focuses on 'wild' foods that conventionally skip the food security analysis which often focus on cultivated and domesticated foods. In a recently concluded report published by Council of Canadian Academies (2014) drawing on the expertise and experiences of high-profile Canadian experts and scholars (some of them are globally-recognized and well -cited experts on food security) noted that traditional or country foods are an important determinant of Canadian Northern Indigenous communities' food security. Therefore the ways of acquiring (for instance harvesting, gathering, fishing) and consuming (rather sharing) traditional foods and understanding various changes that affect the acquisition and consumption of these traditional foods is essential in understanding and implementing community food security interventions particularly among Indigenous communities. Echoed by several other Indigenous communities across the Globe, a detailed knowledge of fishing (for example) related practices by the study communities, the consideration that fishing is not just a food but also an act of community sharing, cultural identity and spiritual well-being is an important dimension of traditional and cultural foods. The community elders – who are the keepers of these valuable food traditions however are seriously concerned about the negative impacts of

government-supported development, policies and management of natural resources in and around Shoal Lake First Nations. Some interesting initiatives and recommendations indicated in this research including developing educational programs for local youths in schools and creating a congenial co-management partnership between local fishing communities and Government authorities is a welcome step towards community healing, empowerment, well-being and strengthening of existing and future community food security.

In order to generate alternative strategies and lessons for ‘feeding the future’ call by Government of United States to tackle Global hunger and food security, it would be useful to learn under what conditions and contexts various community food security initiatives work. The final paper in this special issue is one such example, which examines how the Boreal Gardening Program impacted community food security in O-Pipon-Na-Piwin Cree Nation (OPCN) a community in Leaf Rapids in Northern Manitoba, Canada. The rates of food insecurity among some remote Indigenous communities of Northern Manitoba are startling (in some cases 75 %) and demands urgent attention and intervention. The Boreal Gardening program could only make small impact, however it can be considered a complementary intervention to country food programs, which improve community food security in the harsh climatic region of Northern Manitoba. This intervention nevertheless provided some useful capacity building and creative engagement of local youths- who are the future custodians of community food security. The lessons learned in this innovative intervention are mixed but still hold good promise and create pathways for other agricultural and institutional interventions along with cultural food acquisition traditional activities. As noted in the program curricular innovations like Youth-Eco Action program needs to be replicated with active involvement of community elders to make Boreal Gardening a viable option for future community food security.

All nine papers present some common and unique features of community-based food security summarized as follows:

The concept of food is not just a factor or outcome of production or supply side intervention to be monitored and managed at the regional or national level. Food is viewed as multidimensional and multifaceted concept with different meanings in different communities. It ranges from nutrition, social sharing and bonding, community health and nutrition, food habits, community sharing and big harvests as a pride to community, eco-friendly modes of traditional food acquisition, preparation, consumption and disposal, intergenerational transmission of culture and skills, food as survival strategy to spiritual and ceremonial values, food is a medicine, food hunting as a fitness and recreational strategy and finally food as a way of life/ culture and identity. If voices of communities are counted, it is also useful to know whose voices in the communities are heard and taken into account in determining community food security. The voices, concerns and knowledges of food-insecure communities must be heard in shaping the meanings and interventions for community food security.

As mentioned earlier, community is not a homogenous and single entity but complex interplay of mix and multiple layers of knowledges-practices-beliefs generated by its constituents coming from varied class, gender and demographics. Desmarais and Whittmann (2013)’s analytical approach of discourse analysis to uncover various meanings of food sovereignty from the perspectives distinct actors (First nations, foodies and farmers) in Canada provides useful direction. Community food security should also be examined from multiple perspectives within same communities and among actors beyond defined

community, not just using discourse but also actual practices of community food security through place-based empirical research. Community food security as defined earlier, can reconcile food security and food sovereignty and suggests the way forward to action-agenda for feedings the future. As reflected in most papers, community food security is not just an ideological construct but a pragmatic strategy and invites both formal and informal knowledge systems to transform the food insecurity among communities. The role of new and digital technologies from sciences (DNA barcoding), social sciences (measuring extent of food insecurity) must collaborate with communities' own Indigenous knowledge systems (knowledge-practice-belief) complex. Community food security therefore calls for interdisciplinary approaches of research and development interventions that actively synergizes with Indigenous ways of knowing- communities' own knowledges, perspectives (beliefs and practices).

As underscored by many papers in this issue, traditional/cultural/local food have been suggested to play a lead role in meeting existing and future community food security agendas, enhance intergenerational transmission and strengthen cultural memory. These traditional foods have also been confronting challenges including economic development activities, environmental changes, life style and dietary changes and career choices of existing and younger generation of farmers. In addition, Indigenous communities' food systems have been re-envisioned as sustainable food systems, which are sensitive to the needs of future generations and environment.

Some of the effective community-based food security interventions builds on existing educational and other relevant government programs (health, agriculture , environment, tribal development to name a few) than just being critical to government programs and policies. The joint decision making and management of food production and distribution have worked in some cases or have been envisaged as potential way forward to make community food security interventions work. Rather than measuring the success of isolated community-based food security interventions in a piece meal manner, it would be useful to examine the enabling conditions under which community-based food security nurtures, grows and inspires similar initiatives.

The women and youths are the most important constituents, custodians and carriers of community food security and their contributions in designing, implementing and evaluating community-based food security interventions should be sought actively. The lack of interest among existing small and marginal farmers to engage their youths in farming in South India (Agrawal, 2014), further accentuates the need to re-engage younger generations in securing their own community food security. As well, the role and potential of community leaders – who are seen as community champions of food security – are critical as seen in some effective community-based food security interventions. These leadership roles are often assumed based on demonstrated action and capabilities of these community food champions to self-organize the communities than hierarchical or political positions.

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