Food and Agriculture Organization of the United Nations

Regional Conference

"Strengthening resilient food and agriculture systems –Implementing the Sendai Framework for DRR in the Agriculture Sector in Asia and the Pacific"

15 - 16 March 2018, Ha Noi, Viet Nam

Session Concept Note

Session	**Parallel Session S1 – Livestock Sector**
Title	***Unpacking risks and pathways for resilient livestock in light of the 2030 Agenda***
Date **Time**	Thursday 15th March 2018 14.00 – 17.00 hours
Venue	TBC
Organizers	FAO RAP Contact:
Background	One billion poor people, mostly pastoralists in South Asia and sub-Saharan Africa, mainly depend on livestock for food and livelihoods and globally, livestock provides 25 percent of protein intake and 15 percent of dietary energy.[i] 26 percent of Earth's ice-free land is used for livestock grazing and 33 percent of croplands are used for livestock feed production.[ii]Livestock contributes up to 40 percent of agricultural gross domestic product across a significant portion of South Asia and sub-Saharan Africa but receives just three percent of global agricultural development funding. The demand for livestock products is growing rapidly with rising incomes in the Asia-Pacific region (as also globally) and this trend is expected to continue in the foreseeable future for e.g. estimates suggest that demand for livestock products will continue to surge by 74 percent for meat, 58 percent for dairy products and 500 percent for eggs.[iii] Meeting increasing demand is major sustainability challenge given the resource intensity of modern livestock production systems, resulting in tremendous pressure on global natural resources and the biophysical environment. Livestock sector faces a quite peculiar challenge viz. livestock produce is a critical source of nutrition and means of livelihood, especially for poor, resulting in rapid growth in demand for livestock but livestock production (modern practices) is a resource intense activity resulting in pressures on natural resources as well as increased greenhouse gas emissions through enteric fermentation and manure. The underlying theme in this challenge is that of nutrition vs. emission and natural resource stress. The global livestock sector contributes a

	significant share to anthropogenic GHG emissions, but it can also deliver a significant share of the necessary mitigation effort.[iv]This peculiar challenge - in terms of risks to and by the livestock sector - gets accentuated in cross-sectoral debates on sustainable NRM, DRM, CCA and mitigation, and land-use prioritization / change. At times there lacks a nuanced and contextual analysis of the causal factors, manifestations and the larger cost-benefits especially when analysing the changing nature of risks to and from the livestock sector. This challenge is perhaps most severe for the Asia-Pacific region considering that the region houses more than 60 percent of the world's 925 million hungry people with high levels of under-nutrition and malnutrition.[v] The majority of these poor people live in rural areas and rely on agricultural activities for their food and income with livestock assets acting as a central resource for disposable cash and source of nutrition as well as a capital reserve for consumption smoothening during shocks, weddings and medical emergencies. An additional dimension to the peculiar challenge to the livestock sector is that of recurrent shocks to the livestock sector due to disaster events, food chain crises and conflicts and protracted crises.36 percent of the disaster impacts on agriculture sectors are in livestock sector.[vi]Drought remains by far the most harmful disaster for livestock, causing86 percent of total damage and loss in the sector.[vii]Livestock sector's exposure to risks varies across altitude wherein alpine livestock (yaks) is exposed to extreme weather events and pasture availability issues while low altitude (plains) livestock is exposed to heat-waves and cold-waves in addition to extreme precipitation events and mountainous livestock is exposed to landslides, flash floods and forest fires. Disaster events result in adverse impacts across the sub-sectors and value-chain and are particularly harsh for the small-holders and at times lead to Food Chain Crises (FCC).FCC are also induced and / or impacted by conflicts and protracted crises, which often influence access and availability to pasture and rangelands grazing. Furthermore, the human food chain is under continuous threat from an alarming increase in the number of outbreaks of trans-boundary animal and plant pests and diseases.[viii]20 percent of the world grasslands are degraded[ix] - a trend that is increasing, mainly due to intensified animal density per area. Ever-increasing intensification of livestock production based on concentrate feed adversely affects animal health. In industrial livestock production systems, mortality increases, longevity decreases and disease outbreaks and pandemics are more frequent. Animal welfare and health are crucial to steadily improving livestock production as diseases can decrease livestock production efficiency by up to 33 percent. As livestock density increases and is in closer confines with wildlife and humans, there is a growing risk of disease that threatens every single one of us: 66 percent of the emerging diseases in humans have animal origins and one or two new diseases emerge every year.[x] These diseases affect all types of livestock ranging from large and small ruminants to

	poultry (hen, duck, goose, pig, etc.) resulting in animal mortality, reduction in yield, culling induced losses, trans-boundary epidemics and resultant quarantines, and economic and nutrition losses. Studies suggest an increasing adverse impact on livestock sector due to diseases and disaster events induced by climate change, variability and extreme events. Livestock sector can provide opportunities to adapt to climate change by for example, integrating animal rearing and agriculture, which can help farmers cope with hazards while boosting profits and household nutrition. Livestock management must move from seeking to maximize yield to increasing adaptive capacity. Increased policy attention and financial resources for managing risks induced by climate change and disasters in the livestock sector are urgently needed as is need for the livestock sector to be closely integrated into national climate change and disaster management policies and priorities. It is therefore essential that interactions between livestock sub-sectors (in terms of livestock type, holding size, inputs, processing, and marketing), along with other sectors such as agriculture and disaster management are integrated into the policy planning processes. Despite the increasing global attention on climate change and projections of their likely effects, there remain serious gaps in coverage relating to the tropical regions of Asia and particularly the livestock sector. This greatly constrains dialogues and effective planning for the sector in the region. There is thus an urgent need to increase the understanding of the underlying factors of evolving risks to and by the livestock sector in the changing contexts and climate change as well as enhance capacities to accelerate actions to reduce risks and strengthen resilience of the sector. The 2030 Agenda including the Sendai Framework for DRR (SFDRR) and Paris Agreement attach great importance to strengthening resilience of the agriculture sectors and livelihoods to achieve the SDGs. This is reflected in SFDRR Target-C with a specific indicator for reducing agriculture disaster damage and loss and the related SDG indicator 1.5.2. Resilience of food and agriculture systems is instrumental for achieving several SDGs: no poverty, zero hunger, sustainable cities and communities and climate action. To take forward the 2030 Agenda, specifically the implementation of the SFDRR, this parallel session will thus unpack the existing and anticipated risks facing the livestock sector; take stock of on-going efforts and share lessons learned by stakeholders in reducing risks to and strengthening resilience of the sector; and identify priorities in policies, programme and actions to further strengthen the resilience building efforts. Guided by the four priorities for action[xi]of SFDRR viz. (1) Understanding disaster risk; (2) Strengthening disaster risk governance to manage disaster risk; (3) Investing in disaster risk reduction for resilience and (4) Enhancing disaster preparedness for effective response and to “Build

	Back Better" in recovery, rehabilitation and reconstruction, the session deliberations would focus on the following set of questions: • What is the nature of existing and emerging risks (induced by natural hazards and human-induced hazards, climate change facing the livestock sector and their drivers to the livestock sector? Are there any sub-regional (South-Asia, South-East Asia, North-Asia, and such) patterns evolving in terms of the nature of risks? Further, how do these risks vary across altitude (plains, mountains and alpine), type of livestock (large & small ruminants and poultry), holding size (small-holder & industrial), and production system (mechanised, pastures/ grasslands & backyard)? • How is the nature and manifestations of these risks evolving especially in the backdrop of rapid urbanization in the Asian region, globally connected economies and market forces, and national development priorities? What is the progress in risk analysis, challenges and gaps? • What kind of policy, institutions and capacity exist and are needed for enhancing the livestock sector's resilience as well as its role in managing risks of disasters and climate change? • What efforts / initiatives are on way to prevent/reduce risks and strengthen resilience in the livestock sector? What are the lessons learned and opportunities and gaps for policy and programming? Further, what are the emerging priorities (at the policy, programme and actions levels) to strengthen these efforts? • How to build coherence in policies and investments pertaining livestock sector's development, food and nutrition security, DRR, and CCA as well as urban development to manage risks and strengthen resilience of the livestock sector as countries deliver on their commitments for the 2030 Agenda? Further, how should these policies be translated into a plan of action for the livestock sector to implement the SFDRR and Paris Agreement?
Session objectives	The session aims to: • Analyse the existing and evolving risks to the livestock sector; • Take stock of ongoing actions to manage risks to and build resilience of the livestock sector in light of the 2030 Agenda; • Deliberate on priority actions at policy, institution and programmatic level for strengthening the resilience of the livestock sector to further the implementation of the SFDRR and the overall 2030 Agenda.
Expected outcomes	• Identification of risks to the livestock sector and lessons learned on managing the risks and strengthening resilience of the sector and dependent livelihoods;

	• Identification of priority actions to be undertaken for further strengthening resilience of the livestock sector for implementation of the SFDRR.
Session format	The session could be a combination of a panel discussion and plenary and/or group discussion. The indicative schedule is below: 14.00 – 14.05 Introduction by the Chair 14.05 – 14.20Keynote address 14.20 – 15.20 Panel discussion, moderated by the Chair 15.20 – 15.35Round of question and answers with the panellists by the participants 15.35 – 15.50 Coffee break 15.50 – 16.50 Facilitated 4 working group discussions to identifying priority actions for strengthening resilience in the livestock sector 16.50 – 17.00 Wrap up by the Chair

Participants who would like to contribute papers and/or speak as a panellist at this session,

Please click here for contribution and send the information of your contribution to kaustubh.devale@fao.org and agrisendai2018@gmail.com

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[i] FAO, 2012, 'Livestock and Landscapes', http://www.fao.org/docrep/018/ar591e/ar591e.pdf
[ii] Ibid
[iii] FAO, 2011, 'World Livestock 2011 – Livestock in food security', FAO, Rome
[iv]Gerber, P.J., Steinfeld, H., Henderson, B., Mottet, A., Opio, C., Dijkman, J., Falcucci, A. & Tempio, G. 2013. Tackling climate change through livestock – A global assessment of emissions and mitigation opportunities. Food and Agriculture Organization of the United Nations (FAO), Rome.
[v]Ahuja, Vinod (Editor). 2013. Asian Livestock: Challenges, opportunities and the response. Proceedings of an International Policy Forum held in Bangkok, Thailand, 16-17 August 2012, Animal Production and Health Commission for Asia and the Pacific, International Livestock Research Institute and Food and Agriculture Organization of the United Nations.
[vi]FAO, 2018 (unpublished, forthcoming), '2017: The impact of disasters and crises on agriculture and food security', FAO, Rome, Italy
[vii] Ibid
[viii]FAO, 2018 (unpublished, forthcoming), '2017: The impact of disasters and crises on agriculture and food security', FAO, Rome, Italy
[ix] FAO, 2012, 'Livestock and Landscapes', http://www.fao.org/docrep/018/ar591e/ar591e.pdf
[x] Ibid
[xi]https://www.unisdr.org/we/inform/publications/43291