Health

One Health implementation with communities and local service providers.
Margherita Gomarasca
VSF International

The poster will present the vision of the VSF International network on the implementation of the One Health approach, highlighting the importance of bottom-up participatory approaches that involve local communities and service providers. The One Health approach is central to the mission of the VSF International network to create resilient and sustainable livelihoods at the interface of human, animal and environmental health. To achieve this, VSF International and its members strive to break down silos between sectors through the implementation of transdisciplinary and multi-sectoral collaborations with a multiplicity of actors from civil society, the private sector, the public sector, research, and aiming to systematically include local communities as primary stakeholders in One Health.

In remote rural areas where public and private health service delivery is fragile or absent, as it is the case in several regions in the Global South, the implementation of One Health remains challenging. Local civil society and services, farmers’ and livestock keepers’ organizations have a pivotal role at the interface of the three pillars of health: human-animal-environment. Rather than being considered solely as the beneficiaries of OH interventions, they should have a more central role in co-identification of public health threats and finding locally adapted responses.

In the poster we will present examples of development and humanitarian interventions on how local communities may be involved at different stages of the project cycle and how to bring these lessons to a next higher level to harmonise schedules between sectors.
|   | Health | Supporting local communities around protected areas with a One Health approach: VSF International’s actions to integrate sustainable livelihoods and conservation goals | The poster will present some of the main challenges faced by poor communities surrounding biodiversity hotspots such as protected areas and reserves, and provide examples from Togo, South Sudan, RDC and Zambia, where the One Health approach is used to integrate sustainable livelihoods goals and conservation goals. In the four countries, the areas under analysis present an increasing human, agricultural and animal pressure on a limited territory, leading to habitat fragmentation and loss. This in turn causes a loss of biodiversity and increases the risk of spillover of zoonotic diseases. VSF International members and their partners implement bottom-up strategies to develop sustainable livelihoods opportunities for local communities, reconciling biodiversity conservation goals with social and economic goals. Through multisectorial interventions and partnerships, the projects tackle:

- Economic factors: income generation and diversification (including through livestock interventions), to avoid negative coping strategies such as poaching
- Food security: promoting sustainable livestock and crop production to access nutritious and diversified diets
- Health: integrated animal/human health services deliver
- Land access: securing land tenure and governance for the direct benefit of local population
- Awareness raising: on natural resource and biodiversity conservation |

|   | Health | Natural Livestock Farming, Strategic international collaboration for reducing antibiotic use in dairy farming | Antibiotic use for common cattle diseases such as mastitis and diarrhoea in calves is widespread both in smallholder and largescale dairy farming. This poses a high global risk of resistance against antibiotics. From 2014 to date exchange the strategic collaboration organized by Natural Livestock Farming Foundation (NLF) has strengthened practices that include the use of herbs amongst farmers and veterinarians in India, the Netherlands, Ethiopia and Uganda. This has resulted in a new paradigm in dairy farming, based on the holistic NLF 5-layer approach to effectively reduce the use of antibiotics and other chemical drugs. The collaboration between experts in the field of herbal medicine between India, Ethiopia and the Netherlands has given positive results in reducing the use of antibiotics in these countries. In India, the interest of Dutch dairy experts in Indian herbal medicine has helped to boost acceptance amongst smallholder farmers, milk unions and National Dairy Development Board (NDDB). To the extent that in 2022 it is adopted withing the formal dairy strategy of the Indian Government. In Ethiopia and the Netherlands, the encounter with Indian herbal expertise has opened the eyes of the farmers and veterinarians in the sector to this relatively unexplored opportunity to improve cattle health and reduce the use of antibiotics in both smallholder and largescale dairy farming |

|   | Health | Territorial Innovation Networks (RITER) as a social strengthening strategy as a mechanism for scaling sustainable livestock and the integrality of "one health" | The main environmental impacts originate from the change of land use and the exploitation of natural resources. The Nature Conservancy (TNC) promotes strategies aimed at the adaptation and mitigation of environmental impacts derived from inappropriate agricultural practices, providing productive models sustainable through the RITER (Territorial Innovation Networks) with which three objectives are met: |
| 7 | Dairy and Beef | Extension of the National Programme for Bovine Breeding and Dairy Development for Draught Purpose Bovine Breeds of India  
Kanna K. Siripurapu  
Consortium for Interdisciplinary Water Resources Studies (SaciWaters), India |
|---|---|---|
| 8 | Pastoralism | Recognition of Traditional Grazing Rights of Pastoralists in the Indian State of Telangana - Issues and Challenges  
Shaik Hussain CONARE/WASSAN |

India has a total of 50 cattle breeds registered as defined breeds, out of which only a handful (approx. 8%) of breeds are the milch breeds and the majority (approx. 92%) of the defined cattle breeds are draught purpose breeds. About 60 - 65% of the total cultivated area of India consisting of 85 million hectare requires draught animal power. Draught power accounts to 4.65%, of the total farm energy available in the country. It was estimated that animal power earns between INR 750 to 950 million a day to the country. Draught power animals are pivotal for saving petroleum worth of INR 215,000 million annually. The 20th Livestock Census report of India suggests a steep decline especially in the population of male cattle, which shows a decline by 30.2%, compared to the previous census. Likewise, the he-buffalo population has declined by 42.35%, compared to the previous census. Such population declining trends is alarming for the gene pool and survival of the breeds and demands an immediate attention and course correction. However, the National Programme for Bovine Breeding and Dairy Development of India is only focused on the improvement and conservation of milch bovine breeds and completely neglects the draught purpose bovine breeds of the country.

An estimated 7.1 million pastoralists (17.7 percent of the total state population) inhabit the Indian state of Telangana. Disaggregated data of the pastoralist population of the communities actively engaged in mobile pastoralism is however unavailable for the state. Nationally, Telangana has an estimated 32 million livestock population and ranks 8th in the country in terms of livestock population. Telangana has 4.2 million cattle and 4.2 Buffalos, putting the states at 9th place nationally. The country has a total of 74.26 million sheep in India, out of which Telangana is home to 19 million sheep (26% of the sheep population of the country) making it the top state with the highest number of sheep population. Telangana state has 26,904 sq. km. of forest area which constitutes 24.05 percent of the total geographic area of the state. The forest cover of the state is less than the national average of 21.34 percent. The state has a total of twelve protected areas consisting of eight Wildlife Sanctuaries and three National Parks. Two Wild Life Sanctuaries have been notified as Tiger Reserves - the Amarabad Tiger Reserve (ATR) and the Kawal Tiger Reserve. Of 24,904 sq. km. notified forest area, 5,836.04 sq. km. is included in the protected area network. The demarcation of protected areas and tiger reserves in the state became the bone of contention between the forest dependent tribes, the other traditionally forest dependent communities and the state forest department. Similar to other states of the country the state has lost more than 50 percent of its commons and village pastures to non-pastoralist activities, creating severe fodder deficit in the state. The state has been suffering from 50% fodder shortage, which compelled the state to approach the Indian Grassland and Fodder Research Institute (IGFRI) at Jhansi to develop a fodder management plan for the state in the year 2015. There is not even a single recorded instance of recognition of pastoralist rights in the state. The high pastoralist and livestock population, decreasing commons and village pastures, ever increasing restrictions on access to the traditional grazing lands located inside the protected areas and forests, escalating conflicts between the livestock keepers and forest department and non-recognition of pastoralist rights in the state makes it a high priority area for implementation of the recognition of pastoralist rights under Forest Rights Act 2006.
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<th><strong>When the Sheep Come for Penning - The Economy of Traditional Sheep Penning Practice of the Deccan Plateau Region of India</strong></th>
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<td>Kanna K. Siripurapu SaciWATERS / WASSAN</td>
<td>The main objective is to analyze the economy and interpersonal relationship between farmers and pastoralists of the Deccan plateau region of India. Results of the study suggest that the Indian state of Telangana has 17.4 million sheep, providing about 9 million kgs of manure and about 21 million litres of urine every day. Farmers of the study area reportedly pay an average INR 1.5 - 2 per sheep for penning per night, which generates a revenue of an estimated INR 26 million per day in the state. The average duration of sheep penning in Telangana state is 107 days and the estimated revenue generated from sheep penning alone could be approximately INR 2.7 billion within a span of 3.5 months (107 days). If the revenue generated from the sale of dung of sheep, goat, cattle and buffalo and penning of cattle is calculated then the figure would be even higher. The income from penning and sale of dung accounts to more than a quarter and second most important source of HH income of the pastoralists. However, it is seldom considered as a livelihood and income generation activity, therefore remains grossly neglected by the state missionary. Perhaps, the promotion of penning and dung sale should be institutionalized as manure economy and included as a mandate of both the state agriculture and animal husbandry departments.</td>
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<th><strong>Culture, Traditions, and Grassland Management Practices of Nanda Gaoli Pastoralists</strong></th>
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<td>Prafulla Kalokar Independent Researcher</td>
<td>Bhaldev (the festival of grazing in the forests) one of the major traditional festivals observed by the Nanda-Gaolisi pastoralist communities of the Indian state of Maharashtra is an example of traditional sustainable grassland management and conservation. Bhaldev festival is annually celebrated at the onset of tropical monsoon season. Scientifically speaking, the festival is directly associated with maintaining fodder supplies and breeding livestock. Nanda-Gaolis depend on livestock for their livelihood and livestock depends on forests and grasslands for survival, to be precise. Hence, such reverence for the grass is fundamental for the existence of Nanda-Gaoli community. However, the grass worshipped as Bhaldev has been disappearing locally and lately, it is getting harder to find enough tufts to perform rituals of the festival. The disappearance of Lavhan grass is not only an indication of loss of biodiversity in the forest but also a threat to the legacy of Nanda-Gaolis, which is very unsettling for the community. But, how did we get here? The answer may lie in the decades of implementation of the Colonial and the subsequent exclusionary, anti-poor Forest Act and Laws by the then British Empire and the government of Independent India. The Forest Acts of both the Colonial as well as the Independent India bans grazing in the forests. The forest department in the name of different projects and programmes promotes monoculture timber plantations over grasslands destroying the precious and fragile grassland ecosystems. The alienation of Nanda-Gaolis from forests has been detrimental not only for the livestock and environment but also for the socio-economic and cultural sustainability of the community. For information, grasslands are considered as wastelands by polices of India and there is no policy for conservation and management of grasslands in India.</td>
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The drylands of Ethiopia’s South Omo zone and Uganda’s Karamoja sub region are home to thousands of pastoralists who migrate with their livestock in search of pasture. Livestock is the main source of livelihood for the communities found in these areas. In both locations, disease, drought and degraded grasslands have cut the size of herds, so although livestock rearing is common it is unproductive. Communities living in these regions are faced with other challenges such as high poverty rates and food insecurity, leading to high rates of malnutrition and stunting in children. The heavy reliance on natural resources renders this livestock-based livelihood sensitive to climate dynamics such as recurrent droughts seen in the two regions. Farm Africa through the Livestock for Livelihoods project implemented various activities aimed at improving the socioeconomic status of 10,000 women beneficiaries as well as dietary diversity at the household level. These included:

- Distribution of goats using the revolving goat scheme to improve the socioeconomic status of the women beneficiaries, provide a source of income from the sale of milk, goat kids and goat hides; and the milk produced from the goats contributed to improved household nutrition, particularly in children under five.
- Improving nutritional knowledge through the Social Behaviour Change and Communication (SBCC) strategy aimed at increasing awareness and knowledge of dietary diversity. This was done in collaboration with Africa Innovations Institute (AfriI) in Uganda and the Mothers and Children Multisectoral Development Organization (MCMDO) in Ethiopia.
- Supporting women beneficiaries to be more economically empowered through access to finance provided by Village Savings and Loans Associations (VSLAs) and facilitating them to be involved in profitable enterprises in the goat value chain (goat breeding, leather tanning and milk value addition). These activities stimulated livelihood diversification and trade, contributing to reduced levels of poverty and malnutrition.

Improved Infant and Young Child Minimum Dietary Diversity (IYCMDD) and the Minimum Dietary Diversity Women (MDD-W) scores. In Karamoja, the IYCMDD increased to 61% from 23% and the MDD-W increased from 13% to 42% while in Ethiopia the IYCMDD increased to 41% from 35% and the MDD-W increased from 23% to 32% despite the harsh drought and food insecurity in the project areas during the implementation.

Strengthened women’s economic empowerment as the women were able to contribute to the household’s income which also gave them a voice in financial decision-making and resource allocation. The Women Economic Empowerment (WEE) scores in Uganda improved from 54% to 75% while in Ethiopia it was from 37% to 44%.
| 15 | Socio-economics and economics | **Collaboration Is the New Competition: How a Private Sector Alliance Model Can Sustainably Transform Livestock Markets**  
Giselle Aris  
Land O'Lakes Venture37  
Objectives: The presentation will highlight how the private sector can improve dysfunctional livestock markets through innovative, pre-competitive private sector collaboration a private sector alliance model wherein different private sector actors come together to form an alliance rather than operating as independent actors. The resulting market advancement can and have yielded significant improvements in livestock productivity, which helps communities who may be facing food insecurity have better access to nutritious, local foods produced using climate-smart practices.  
Results: Through this groundbreaking alliance approach, actors in the livestock market are able to adopt inclusive, accessible climate-smart approaches for different agro-ecological zones. We will be using two initiatives as case studies: the Nourishing Prosperity Alliance (NPA) and Dairy Nourishes Africa (DNA). NPA focuses on advancing the commercial viability of forage markets in East Africa, while DNA is focused on transforming East Africa’s dairy sector via farmer- and consumer-allied dairy processors.  
Significance: Historically speaking, many development programs have proven difficult to sustain beyond the lifespan of short-term projects, resulting in sub-par economic, nutritional and climatic impacts. This presentation will show how private sector-led, government-enabled solutions can offer long-term commercial viability through sustained farmer demand, built up over time. This gradual, sustainable transformation attracts youth and sets the stage for a climate-resilient, nutritious future, while harnessing market systems that are farmer- and consumer-allied.  
Note: latest NPA and DNA data to be included in poster (we have numerous quantitative metrics); the above is high level overview (average farmer age, access to grazing land, changes in milk yield, reductions in emissions intensities, climate-resilient inputs and approaches) |}
| 16 | Socio-economics and economics | **Strengthening the cooperation and partnership between yak husbandry countries.**  
Batbaatar Bayarmagnai  
Dairy Asia  
To introduce the project proposal on "Strengthen the partnership and cooperation between yak husbandry countries" and promote the knowledge and information sharing on the sector. |}
| 17 | Environment | **Addressing the supply and demand of environmental impact data to empower livestock development**  
Frances Ryan  
SEBI-Livestock @ University of Edinburgh  
The positive and negative impacts of livestock production systems on the environment are well recognised, as are the impacts of changing environments on livestock systems. Stakeholders in livestock development are increasingly challenged to achieve multiple objectives: improve productivity, increase women’s empowerment, reduce poverty and improve nutrition, all whilst recognising environmental impacts. In order to move forward these stakeholders need to have evidence available to them to understand the environmental context of their actions and outputs. This poster will provide insight of the key actors that demand and supply livestock and environment data, information and evidence. These insights have been derived using a network analysis conducted on a series of discussion undertaken at Livestock Data for Decisions (LD4D) September 2022. LD4D is a network of livestock development stakeholders as well as environmental modellers and commentators. Through this poster at GASL, the SEBI-Livestock team, on behalf of LD4D, will draw on ideas from session participants. Outputs from this activity will help to support better decisions and actions by stakeholders as well as supporting global commitments such as the Global Methane Pledge. |}
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<td><strong>Livestock Sustainable Land Use Systems for the Amazons: Lessons learnt from implementation actions in Colombia</strong>&lt;br&gt;Julián Chará&lt;br&gt;CIPAV, Centre for Research on Sustainable Agriculture</td>
<td>Sustainable Livestock land-use systems (SLUS) include a set of arrangements, good practices and resource management strategies that contribute to improving the environmental, economic and social sustainability of the dairy and/or beef value chains. This poster describes the process of selection, development, testing and promotion of Livestock SLUS in the Amazon Region of Colombia in order to contribute to improve productive and environmental sustainability of cattle ranching in a context of high deforestation risk. The SLUS selected that included, among others, pasture management strategies and silvopastoral systems, contributed to improve plant and bird diversity, reduce GHG emissions, increase carbon storage and improve land productivity and livelihoods. An analysis of the lessons learnt in the implementation and upscaling of the SLUS selected is also presented. It provides key points to take into account to improve sustainability of livestock production in other contexts where food production creates challenges for natural resource conservation and livelihoods.</td>
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<td><strong>Mapping of policies, programs, projects and actions aimed at promoting sustainable livestock practices in Latin America and the Caribbean</strong>&lt;br&gt;Rogerio MAURICIO&lt;br&gt;UFSJ CEG GASL</td>
<td>The objective of this study was to collect actions towards more sustainable, inclusive and resilient production systems in Latin America and Caribe (LAC), as part of the transformation of the world food system. It also aims to contribute significantly to the Sustainable Development Goals (SDG) of the UN 2030. It was identified around 25 projects that aimed at promoting sustainable livestock practices in LAC. This survey demonstrates that in LAC there are clear evidence on sustainable livestock practices that can contribute for the for main domains related to livestock. However, there are still needing to find support for Implementation of national &amp; local policies to improve sustainable livestock production, long term policies, and strategies to scaling up technologies (e.g., Silvopastoral systems).</td>
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