

OFFICIAL FEEDBACK FORM

DIALOGUE DATE	Saturday, 24 April 2021 16:00 GMT -04:00
DIALOGUE TITLE	Enabling Sustainable livestock production and Agri business management.
CONVENED BY	Riyadh Mohammed, Dr Adrian Diasley
DIALOGUE EVENT PAGE	https://summitdialogues.org/dialogue/7704/
DIALOGUE TYPE	Independent
GEOGRAPHICAL FOCUS	No borders

The outcomes from a Food Systems Summit Dialogue will be of use in developing the pathway to sustainable food systems within the locality in which they take place. They will be a valuable contribution to the national pathways and also of interest to the different workstreams preparing for the Summit: the Action Tracks, Scientific Groups and Champions as well as for other Dialogues.

1. PARTICIPATION

TOTAL NUMBER OF PARTICIPANTS

52

PARTICIPATION BY AGE RANGE

0-18

15

19-30

20

31-50

15

51-65

2

66-80

80+

PARTICIPATION BY GENDER

32 Male

20 Female

Prefer not to say or Other

NUMBER OF PARTICIPANTS IN EACH SECTOR

8 Agriculture/crops

4 Fish and aquaculture

17 Livestock

3 Agro-forestry

Environment and ecology

Trade and commerce

8 Education

Communication

7 Food processing

Food retail, markets

5 Food industry

Financial Services

Health care

Nutrition

National or local government

Utilities

Industrial

Other

NUMBER OF PARTICIPANTS FROM EACH STAKEHOLDER GROUP

4 Small/medium enterprise/artisan

Large national business

Multi-national corporation

14 Small-scale farmer

17 Medium-scale farmer

4 Large-scale farmer

Local Non-Governmental Organization

International Non-Governmental Organization

2 Indigenous People

10 Science and academia

Workers and trade union

Member of Parliament

Local authority

Government and national institution

Regional economic community

United Nations

International financial institution

Private Foundation / Partnership / Alliance

Consumer group

Other

2. PRINCIPLES OF ENGAGEMENT

HOW DID YOU ORGANIZE THE DIALOGUE SO THAT THE PRINCIPLES WERE INCORPORATED, REINFORCED AND ENHANCED?

The dialogue was designed using the prescribed format and drew on participants that were representative of the entire food system regionally.

HOW DID YOUR DIALOGUE REFLECT SPECIFIC ASPECTS OF THE PRINCIPLES?

The dialogue reflected the principles by being totally inclusive, engaging, non-evaluative and by assuring the audience were representative of farmers, academics, private sector, consultants, youth organizations, ex-prisoners and civil society bodies that advocate on their behalf.

DO YOU HAVE ADVICE FOR OTHER DIALOGUE CONVENORS ABOUT APPRECIATING THE PRINCIPLES OF ENGAGEMENT?

Be inclusive. Create a non-evaluative environment. Have the facilitators and curators undergo the training, maintain the standard format as far as practicable because it does lend itself to an effective and efficient dialogue. Have facilitators sign in early, identify early the people you wish to participate, recognize in the virtual settings some of your key partners like the rural women and rural men may have challenges connecting so find ways to ensure their participation. We were fortunate that at least seven of the women from the rural women in Jamaica, 3 from Trinidad and Tobago and others from St Lucia and Barbados were able to participate. Recognize people from outside your nation and region may also have value. Make everyone feel welcome and appreciate all contributions.

3. METHOD

The outcomes of a Dialogue are influenced by the method that is used.

DID YOU USE THE SAME METHOD AS RECOMMENDED BY THE CONVENORS REFERENCE MANUAL?

Yes

No

4. DIALOGUE FOCUS & OUTCOMES

MAJOR FOCUS

This dialogue examined how the Caribbean region can enable sustainable livestock production and improved agribusiness management. With livestock production having significant impacts on climate change, finding ways to take to scale more sustainable climate smart and resilient practices in livestock production is a critical imperative. After a short framing discussion by curators, participants would be broken into five facilitated discussion groups , namely

- a) Neo tropical Animal Conservation, Production and Utilisation
- b. Encouraging and sustaining good agriculture practices in livestock farming
- c) Reducing livestock impacts on environment
- d. Creating sustainable partnerships between farmers, food processors and consolidators/distributors
- e. Climate Resilient and Sustainable Livestock Production and Consumption (Challenges, risk and opportunities)

After the group discussions, facilitators would present summaries in a plenary,

ACTION TRACKS

Action Track 1: Ensure access to safe and nutritious food for all

Action Track 2: Shift to sustainable consumption patterns

Action Track 3: Boost nature-positive production

Action Track 4: Advance equitable livelihoods

Action Track 5: Build resilience to vulnerabilities, shocks and stress

KEYWORDS

Finance

Innovation

Human rights

Women & Youth Empowerment

Policy

Data & Evidence

Governance

Trade-offs

Environment and Climate

MAIN FINDINGS

There are several neo tropical non conventional livestock that provide a climate smart and resilient pathway for the livestock industry regionally

applying circular economy principles, , indigenous techniques and integrative farming approaches are imperatives for making livestock production climate smart and resilient

partnerships that allow for scientific testing, training and development, data collection and analysis, knowledge transfer, capacity building , mentorship and coaching is critical to the sustainability and resilience of the region's livestock sector

GPS tracking, IOT sensors and other technology can help improve quality, safety, security and help better manage the key challenges and risk associated with the sector. Such as predial larceny, monitoring emissions and monitoring livestock impacts on soil health and biodiversity with intent for high impact mitigation and adaptation strategic intervention

Improving the quality and availability of data and analytics in the livestock space regionally can have significant benefit in improving adaptation and mitigation impacts

Applying international standards and indigenous practices can also have significant impacts with a lot of co benefits in issues of water availability and quality, sustainable and decarbonized energy, reducing emissions, and enhancing climate resilience while enabling sustainable livelihoods

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OUTCOMES FOR EACH DISCUSSION TOPIC - 1/5

Neo tropical Animal Conservation, Production and Utilisation

there are many opportunities to sustainably rear neo tropical animals as a sustainable livestock in a climate smart and resilient manner

The major domestic livestock species being utilized are goats (meat and dairy), sheep, cattle (beef and dairy), pigs, rabbits, ducks and layers (table eggs). The issues encountered by subsistence and small scale livestock farmers are:

- 1) Lack of tropical and well adapted livestock species and genetics for breeding programs,
- 2) Cost of feed for monogastric animal production,
- 3) Lack of resources by the public sector to properly advise and train farmers, as well as to supply timely support services (Artificial Insemination),
- 4) Untimely distribution of land leases
- 5) Poor management and planning for fodder production for the dry season for ruminant production,
- 6) Praedial larceny,
- 7) Lack of a well-coordinated marketing agency for livestock and livestock products, 8) Inaccurate data collection methods by data collecting organisations, hence a misrepresentation of the true potential of local agriculture,
- 9) Lack of Policies for Wildlife farming (e.g. Intensive Agouti Production) and
- 10) The major "Disconnect" between the educating bodies, the public sector and the private sector.

Small holder farms are facing very tough times as these issues have

been plaguing the livestock industry for generations. Amendments should include

- 1) attaining adaptable livestock species for production, focusing on producing feed locally and utilizing non- conventional feed resources, considering public sector services year round since agriculture doesn't have a start and finish period, implementation of commercial indigenous wildlife production and more active and meaningful round the table discussions between all food production stakeholders.

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OUTCOMES FOR EACH DISCUSSION TOPIC - 2/5

Encouraging and sustaining good agriculture practices in livestock farming.
How can we better encourage the use and application of good agriculture standards and practices?

How can we improve the provision of extension services, technical support and advisory service available to livestock farmers?

What financial structures, support and regimes are needed to support and help farmers to scale climate smart resilient and nature positive livestock production, regionally, internationally?

What partnerships and collaborations need to be developed to help scale, sustain and develop more climate smart resilient and nature positive forms of livestock production?

In order to encourage the use of GAP and standards there is the need to establish what are GAP and the standards to which will be adhere to. This may vary in some countries based on conditions there. Some of these GAP pertain to quality feed/water and also a health and safety of the animals through a controlled environment.

Farmers can also be encouraged by making land available for livestock farming and grazing and also giving incentives to use safe chemicals and develop proper and safe facilities for rearing and slaughtering.

Need to ensure that the animals have quality feed like in other countries. There is a concern that the animals are not being feed good forage and hay. The need to look at how Caribbean nations could barter from each other in order to support needs. There is a challenge with feed and grain and instead of looking to gmo corn from outside we need to grow our own local products to make animal feed eg sweet potatoes, casava which is more nutritious and better for animal consumption.

Some persons have the challenge of no land to graze animals therefore it was suggested that countries with large land mass eg Guyana could grow lots of hay for other countries so that in times of shortage/disaster good hay can be accessed and it can be used as a feed bank (proper storage methods adopted). Traceability of feedstuffs.

Also with respect to the health of the animals more natural medicines can be used eg neem as a wormer in Antigua where research has been done on this.

The volcano in St Vincent is affecting livestock feeding, hence there is a need for proper post harvest storage of hay etc in times like these so farmers can access.

Protective environment in order to keep them safe from larceny as this is an issue for most farmers and other external factors like extreme weather conditions as experienced in the Caribbean.

The need for leaders to be proactive in order to deal with climate change and its impacts

Micro chipping of animals with respect to safety and being able to track if stolen

Proper slaughter house facilities

Market price that is consistent with quality produce

Have an appropriate waste management system and using the manure back into the soil – this contributes to zero waste and circular economy

Need to ensure dairy farming practices do not have an adverse impact on the local environment

The need for research and development in each island in order to have statistics and info to know what we are producing, what the animals are eating in order to support GAP

Collaboration between organisations regionally eg CARDI, the university FAO

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OUTCOMES FOR EACH DISCUSSION TOPIC - 3/5

Reducing livestock impacts on environment

Greater use of indigenous practices

Expanded use of circular economy principles regarding livestock was. Using bio digester convert waste to energy and biofuels

Livestock protocol should follow the same processes and protocols that govern the crop production model.

Government backing, development, and support of insurance specific for the agricultural sector, to include specialized sub-sectors and operations of varying levels.

- Jamaica has recently launched such a program.

NOTE: One example of an insurance product being introduced in the Caribbean's is termed Parametric Disaster Insurance, an event-based rather than a loss-based payout system.

- Dialogue among nation states in the region is essential. This is a mechanism, for among other things, identification of regional markets and non-traditional collaboration and cooperation.

- A leader in the Caribbean research & development and ag education is the Bahama's Agriculture and Marine Science Institute (BAMSI) is a rich source of real-time, authoritative entity providing ag-specific data and resources regionally and globally. Activities currently underway at BAMSI include:

- An EU-funded incubator for small ruminants (i.e., goat, sheep, deer)

- Research on feeding and farming methods

- Development of regional best practices

NOTE: The Cuba Model is the framework being utilized.

- The Integrated Production Model is of value within this context.

- The example of Tanzania's planting of plantain and coffee together, was offered.

- Incorporation of chicken into an environment such as this (Nathan is planning to expand his company's farming interests to include chicken farming) was suggested, as appropriate in this context. The droppings (as well as those from ducks and pigs would serve as organic fertilizer.

- Minimally, barriers to and concerns with the use of organic fertilizer were identified as:

1. Cost (within the large farm or commercial context). For example, one acre of farmland would require 2-4,000 pounds of manure annually.

2. The runoff and by-product effect – specifically, phosphorous-driven “green” water. The green water produced can be mitigated by planting “run-off” or “cover crops”.

NOTE: Currently, Nathan's company has a team of scientists working on developing an organic fertilizer formulation. It'll be 6-12 months before a usable sample/formulation is available for testing. The goal is making the fertilizer available commercially, as well as for their personal use on their 600-acre farm.

- Suggestions for minimizing the impact of husbandry or animal farming on the environment included:

Regional Collaboration & Cooperation.

- Specific reasons for this suggestion included provision of technical assistance by experts, knowledge-sharing and guidance (i.e., best practices, innovation, and technology (not necessarily smart farming options)).

- Develop, fund, and maintain a highly-integrated system. Improving access to information and resources to include greater connectivity was another suggestion.

- Specific interventions such as government expanding and improving broadband access, allocating radio bandwidth dedicated to broadcasting information to outlying, tech-poor/tech unsavvy farmers. This includes dedicated government-sponsored audio/radio spots. China and Africa are contemporary examples of countries hosting forums/spots/access points for outlying persons.

Incentivization.

- Offer/fund efforts to identify other scientific means of minimization and/or mitigation in this discipline.

Strengthening of existing regional extension services.

- The current “bottlenecking” and inadequacy of service provided were identified as specific examples of how poor extension services act as barriers in this context.

Other solutions.

- Rotational grazing

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Ambient water testing regimes should be adopted and deployed regionally

Rigorous soil testing should also be implemented and small medium and large scale livestock farms

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OUTCOMES FOR EACH DISCUSSION TOPIC - 4/5

Creating sustainable partnerships between farmers, food processors and consolidators/distributors

Contract farming and production can be a useful tool in improving partnerships

The issue of traceability is of critical importance and with solid partnerships across the value chain can enable improved tracking of traceability through the value chain

leveraging technology across the value chain can reduce cost to all players and enhance competitiveness across the value chain

Farmers, processors and distributors need to build strong networks that help leverage, capital, and resources and improve flows of materials and resources throughout the value chain. formalizing these networks can have significant benefit

Structuring solutions be it technological, managerial and otherwise to capitalize on opportunities and manage interactions across the value chain can have significant process and impact benefits

Sustainable procurement practices can help communicate requirements and encourage the use of good agriculture practices, decarbonize transport and processing and bring other system wide benefits across the value chain for all parties and the environment

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OUTCOMES FOR EACH DISCUSSION TOPIC - 5/5

Climate Resilient and Sustainable Livestock Production and Consumption (Challenges, risk and opportunities)

Livestock produces a high level of GHG and also contributes to some biodiversity loss
Indigenous practices can relieve the burden of live stock on the environment
greater use of circular economy principles and integrative farming techniques can help manage emissions and waste throughout production and delivery to the market

Challenges includes issues in water availability and impacts, irrigation, storage. Other challenges include cold storage of fresh produce, feed supply, managing waste and emissions, environmental impacts, outmoded farm management approaches that affect quality, safety, yields, animal cruelty and environmental impacts. The production of animals is a function of the quality, quantity and seasonal distribution of forage, the amount of forages consumed by animals and the efficiency of forage consumed. The quality, quantity and seasonal distribution along with the amount consumed would rely greatly on the management of the forages available, while the effective conversion of the forage consumed would highly rest on the physiological state of the animal.
The efficient utilization of available forage can be achieved by preparing a forage plan for the entire year.

The global poultry industry holds a very successful and complex supply chain system that all other livestock production sectors hope to achieve. In the domestic world, poultry covers many species of egg and meat type chickens, ducks, turkeys, quails, geese, guinea fowls, peafowls and a wide range of semi domestic species. The poultry industry is broken up into three main areas; breeding and reproduction, growth and production and processing, packaging and marketing.
Poultry is the largest agro-industrial enterprise surpassing both sugar and rice in the Caribbean. Annual gross industry sale is estimated at over US \$500 million. The industry employs over 75,000 persons directly and is the largest generator of small business and rural entrepreneurship. Approximately 82% of all animal protein eaten in the Caribbean is from poultry.
Significant investment opportunities exist in feed manufacturing and hatching egg production, value added products and increased intra-regional trade.

The poultry industry strategically focuses on using the vertical integration approach to managing its supply chain. This system relies heavily on the supplier systems to feed directly into each subsector which lends to a higher production output, increased product quality and maximizing of profits. The vertical integration system for the broiler industry includes segments for: 1) primary breeding and genetic selection, 2) feed processing and distribution, 3) sub breeder farms, 4) hatchery operations, 5) grow out farms, 6) processing plants, 7) further processing and 8) transportation and marketing.

There is a need to promote and have wider adoption of Global GAP (Good Agriculture Standards) and practices.

there is need to improve farmer education and production at level of the farm by providing coaching, mentorship and technical support at the level of farm and community

Partnerships that allow for students to work directly with farmers in a mutually respectful and interactive learning manner can help improve technology transfer and adoption on level of farms. It was felt that partnerships between farmers, academia, schools and civil society is an imperative to effectively navigate the many challenges

Education is not only required for farmers in modern approaches but for consumers to enable them to demand higher standards and cruelty free food

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AREAS OF DIVERGENCE

N?A

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