OFFICIAL FEEDBACK FORM

DIALOGUE DATE	Saturday, 8 May 2021 12:30 GMT -04:00
DIALOGUE TITLE	Accelerating Adoption of Technology, IOT, and Industry 5.0 approaches to climate smart and resilient agriculture development in the Caribbean.
CONVENED BY	Issa Baisden, Marjorie Beazer, Christopher Chinapoo
DIALOGUE EVENT PAGE	https://summitdialogues.org/dialogue/7708/
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 57

PARTICIPATION BY AGE RANGE

2	0-18	18	19-30	30	31-50	3	51-65	4	66-80		80+

PARTICIPATION BY GENDER

30	Male	27	Female		Prefer not to say or Other

NUMBER OF PARTICIPANTS IN EACH SECTOR

7	Agriculture/crops	5	Education	1	Health care
3	Fish and aquaculture	2	Communication	2	Nutrition
5	Livestock	9	Food processing		National or local government
3	Agro-forestry	1	Food retail, markets		Utilities
9	Environment and ecology	5	Food industry	1	Industrial
	Trade and commerce	4	Financial Services		Other

NUMBER OF PARTICIPANTS FROM EACH STAKEHOLDER GROUP

10	Small/medium enterprise/artisan		Workers and trade union
	Large national business		Member of Parliament
	Multi-national corporation		Local authority
13	Small-scale farmer		Government and national institution
9	Medium-scale farmer		Regional economic community
4	Large-scale farmer	1	United Nations
	Local Non-Governmental Organization		International financial institution
	International Non-Governmental Organization		Private Foundation / Partnership / Alliance
5	Indigenous People		Consumer group
15	Science and academia		Other

2. PRINCIPLES OF ENGAGEMENT

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

Principles were reinforced in the design and by facilitator engagement of each group. An engaging space was created that allowed for all views to be expressed without evaluation, Facilitators engaged in active dynamic listening, recorded all contributions and engaged in deeper exploration through use of prompt questions and group facilitation techniques

HOW DID YOUR DIALOGUE REFLECT SPECIFIC ASPECTS OF THE PRINCIPLES?

The dialogue reflected the principles in its design, structure, composition. The dialogue was open to members of the Impact youth sustainability Jamaica, the Jamaica Network of Rural Women Producers, The Caribbean Youth Environment Network, The Internet Society Chapters across all CARICOM States, The Caribbean regional Youth Network, Real Agriculture, TT Fixit, the National Youth Councils and all regional Farmer bodies and associations

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

Plan and prepare. Organize more time for engagement and less time for framing Have facilitators undergo the training Give a little time after plenary for additional comments leave some time at the end for participant open interactions Have facilitators log in early and provide them co host rights If in online have technical team start placing participants into groups on arrival

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 players in the food system ecosystem can accelerate the adoption of the Internet of Things and Technology that support enhancing the sustainability, resilience and innovation of the food system ecosystem in the Caribbean. Participants also examined issues contributing to the digital divide and strategies that can be executed now to begin creating a more sustainable and resilient food system by 2930. After a short framing session the participants will be broken into five facilitated discussion groups, namely
a. Navigating the agriculture and Technology Divide
b. Financing the acceleration of Technology Adoption on Agriculture
c Improving agriculture value chains by leveraging available and future technology. Possibilities for accelerating Caribbean progress
d. Improving Rural Connectivity
e. Capacity building and skill development. Making Opportunities accessible to rural farmer women and youth
After the discussion groups, facilitators shall present summaries of the discussions in a plenary discussion.

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		Policy
	Innovation	✓	Data & Evidence
	Human rights		Governance
	Women & Youth Empowerment		Trade-offs
		✓	Environment and Climate

MAIN FINDINGS

Technology is an enabler but it is not the solution to the many challenges in agriculture and food systems
As an enabler technology can enhance ability to collect, assess, disseminate, utilize information and data
Aligning technology to support climate mitigation, adaptation and building community based social cohesion, equity and resilience is seen as the best use and means for acceleration technology use in food systems around the Caribbean
Scaling Climate Finance and Improving access in areas that support greater energy efficiency, water efficiency, waste efficiency, processing effectiveness and connectivity of rural and urban communities provide many opportunities to accelerate and scale actions on SDGs, Paris Agreement and Sendai Framework for Disaster Risk Reduction
there is need to develop competencies, capabilities and capacity of farmers, processors and others in the food system to properly leverage technology. It was felt that shared platforms, leveraging social capital and clusters provides great avenues to reduce cost and realize benefits of wider deployment of technology
It was felt that partnerships between agriculture organizations, trade facilitation and the Internet societies can go a long way in more expeditious deployment of community networks and addressing the digital divide in rural communities
Coaching, mentorship, consultancy and capacity building can be critical enabling tools to support more efficient and effective uptake of technology in the food systems
Leveraging technology to address issues of crime, security and monitoring the health of plants
There is need to take a comprehensive view of risk. Risk from climate perspective, risk from community profile, risk by community, risk from specific and cascading risk
there is need to leverage technology to improve data availability eg climate analytics, deploy share platforms and to safely and securely manage data in cyber space ie addressing cyber security issues and issues of accessibility, monitoring and tracking food waste
There is need to leverage technology to support branding, marketing, advertising and promotion of food and agriculture as a viable career and business option for youth, women and vulnerable groups
There is need for regional and at standards to support accelerating use of technology in agriculture
Sustainable procurement can help shape the types of technology that is leveraged and brought to bear on agriculture
There is also potential for drone technology and GPS technology in realizing climate smart and resilient agriculture practices
A regional working group could be convened to help shape a regional strategy on the uptake of technology and champion the deployment of Community Networks regionally```
Utilize innovation Lan strategy to better connect innovators and food system participants

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KEYWORDS

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OUTCOMES FOR EACH DISCUSSION TOPIC - 1/5

Navigating the agriculture and Technology Divide
There is a critical need to address connectivity within rural communities, rural producers and processors
Deployed more regional community networks
Equity should underline the strategy and there needs to be greater access, improved energy, water and waste management efficiency
There is need to place an emphasis on education/digital literacy/technology literacy and the ways can position technology to make better use of natural resources, conserve water and improve yields
Partnerships across e government, civil society, private sector, and academia are critical in navigating issues across the digital divide. Institutions like UTT, UWI, UWI Open Campus, ASTI and all the National Training Agencies need to work together in address green and technology skill gaps among food system providers

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OUTCOMES FOR EACH DISCUSSION TOPIC - 2/5

Financing the acceleration of Technology Adoption on Agriculture

Scale should be leveraged to help reduced cost of technology that can benefit clusters and the entire sector
Grant and donor programmes need to create flexible pathways to accessing financing
Climate financing should also cater to the leveraging of sustainable technology or the alignment of traditional technologies to enhance climate smart and resilient approaches to technology
There is need to help enhance the capabilities to apply for and mange grant and loan financing utilize to leverage technology
Financing criteria should be aligned to and give support to producers and processors leveraging technology towards making their operations climate smart and resilient
Insurance should provide reductions based on proper leveraging of climate adaptation and mitigation approaches and so on

ACTION TRACKS

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OUTCOMES FOR EACH DISCUSSION TOPIC - 3/5

Improving agriculture value chains by leveraging available and future technology. Possibilities for accelerating Caribbean progress

there is a lot of room for IOT, sensors, GPS,, Drone, Analytic technologies, WIFI Cameras and other technology in the Caribbean Space
Aquaponics, Vertical Hydroponic Farming (Indoor and Outdoor), bio digesters and others technologies have tremendous potential for improving Value chains
Block Chain Technology can be a great tool for accelerating action throughout the food system value chain
Smart factory, Industry 4.0
Traceability throughout the value chain is of critical importance. Providing support for farmers, processors and distributors could have significant benefits and impact in improving Caribbean competitiveness and resilience of its food system
Partnerships across the value chain can make it easier to adopt technology and manage the transition process

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OUTCOMES FOR EACH DISCUSSION TOPIC - 4/5

Improving Rural Connectivity

Community Networks are seen as a critical strategy for improving rural connectivity
Connectivity and internet access needs to be seen as a right and providers need to be encouraged to connect rural communities as a matter of principle. It is critical to improving food systems, education and the overall quality of life that issues in rural connectivity needs to be addressed
It has been a real challenge for rural communities regionally to remain connected and conduct e commerce and other business with limited and constantly failing internet regionally
Internet connectivity, broadband and fiber should be a priority of government, private sector and local government regionally
Partnerships can be an excellent vehicle for deploying greater access, community networks and free access
finding ways to demonetize the internet through models of IAAS and SAAS should be evaluated and deployed
A regional and national working groups should be created to examine and address the issues of rural connectivity. Technical members of ISACA, ISOC, ITU and ISO Technical committees could be drawn upon to support this initiative
Flexible funding regimes should be developed and deployed to allow partner agencies to connect rural and vulnerable commutes as a critical requirement in enabling a just and equitable transition
Free broadband nd and internet access should be provided to all rural schools, community centers, parks and other shared spaces as a means of increasing access and affordability. With all services and commerce being transitioned online connectivity can no longer be seen as a luxury but as the means by which people connect with services. To leave communities without access is to reduce the market and handicap the economic and social potential of countries and region as a whole

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OUTCOMES FOR EACH DISCUSSION TOPIC - 5/5

Capacity building and skill development. Making Opportunities accessible to rural farmer women and youth

There is need to include digital literacy in all education programmes for farmers
Priority attention needs to be given to women, youth, ex prisoners, justice involved youth
There is need to leverage technology to help make agriculture sexy ie appealing as a career option and viable
coaching, mentorship and support are critical to the success of all initiatives to accelerate and scale the use of technology in agriculture ongoing
Proving effective support beyond deployment of technology is critical to learning and improvement of food systems
Education needs to cover food safety, traceability, and the necessary components to assure literacy and proper use of technologies to improve practices at level of farm and communities
Deployment in clusters (groups and network) is seen as one of the best ways to reduce cost of IOT and other technology deployment eg renewables servicing a community, commercial composting at community scale, bio digesters , drones to plant and monitor crops, water sensing technology monitoring water content and biodiversity of soil, Capacity building and skill development. Making Opportunities accessible to rural farmer women and youth, GPS tags tracking livestock location and health and so on
There is need to revise currcula

ACTION TRACKS

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AREAS OF DIVERGENCE

Blockchain technologies consume great deals of power and is not totally sustainable. Some participants felts there are other ways with lower carbon footprint to realize the same benefits of block chains.

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