Notes on Group Discussions in UN Food Systems Summit Independent Dialogue:

Pathways to Sustainable and Resilient Food Systems 2 (held on March 20<sup>th</sup>, 2021),

Convened by Christopher Chinapoo of Five Star Quality & Justice Associates,

<u>Co Convened and Curated by: Riyadh Mohammed of Tropical Agriculture</u> Consultancy Services, Issa Baisden, Stacey Alvarez de La Camps and Dr. Kevan Leach

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After the framing remarks and the initial polling, participants were broken into the five facilitated discussion groups, In the five discussion groups, participants responded to the following prompt questions with some variations and questioning trails

- 1. What will success look like by 2030 (In relation to discussion topic)? Ask to consider systems, policies, processes and practices?
- 2. Share why will this be a good outcome?
- 3. To get there. What actions/what steps, what strategies do we need to happen ro get there? What actions should we prioritize? (Advocacy, systems, processes, practices?)

Considering all that has been said what actions can we take in our circles of influence to start making progress towards success?

How can we better cooperate to (advance action)? On the discussion topic?

Is there anything else anyone wants to contribute before we return to plenary?

There was no judgements or evaluation on rightness or wrongness. All views were accepted in a green light thinking environment. Participants were reminded of the principles of engagement and encouraged to see the dialogue as the beginning of a process and not an end. All participants were asked for their points of view and reminded they can speak frankly respectfully and allowed to hold different views without being disagreeable. The Chatham house rules were maintained, ask others for point of view on contentious issues, allow everyone to feel. Safe to disagree. After summaries participants were provided additional. Opportunity to share their insights, views, and comments

Group 1: Enabling greater participation of women, youth and vulnerable groups (including youth in conflict with the law) (Facilitators - Tamisha Lee and Marjorie Beazar)

## The topics of conversation were:

- There is a need for greater inter- and intra-island communication; it is no longer effective to work in silos.
- We cannot afford to indulge in adversarial politics in food systems. if the agriculture
  in the region is to become sustainable. The politics of inclusion, bipartisanship,
  access, ongoing engagement, participation and well designed partnerships is what is
  required to power increased access of women, youth and vulnerable populations
  whilst enhancing resilience and sustainability of food system
- We need to incorporate others who have not traditionally been present at the table and then the course of the discussions.
- There needs to be a more hands-on and practical presence of agricultural topics in the educational system.
- Agriculture itself has educational principles embedded in it, so the implementation of education through the lens of agriculture is an important tool of inclusivity for youth women and other vulnerable groups.
- We need to improve the presence of vulnerable and underrepresented groups by first measuring who is currently there. We need to look at the data regarding who is already there, analyze that data and come up with strategies and targets geared at increasing the presence of these groups.
- Agriculture needs to be rebranded and re-imaged in order to combat the stigma that goes along with agriculture and agricultural activity. The young participant in this group stated that youth perceive agriculture as being for old men, and being reminiscent of slavery. It is also seen as boring and not financially viable.
- An important consideration is the fact that they are policies on the books need to be effectively implemented and/or revamped. For example, in Trinidad and Tobago there is a law on the books that says that if you catch rainwater, you then have to pay for the rainwater that you just caught for free. These types of fines clearly discourage any active engagement in sustainable agricultural practices.
- One aspect of the barriers that are faced is the scenario of how to help an individual who has been incarcerated to gain a foothold in the agricultural sector. Mention was made that instead of a house, such an individual could be given agricultural land.
- Another barrier faced is the inadequate use of technology.
- In terms of funding, a major barrier is that most lending institutions require collateral, which marginalized and disadvantaged individuals do not have access to.
- It is discouraging when seed money is not available, and most investors are looking for a return on their investment. Individuals would need to be trained to put together comprehensive and detailed proposals, and be given enough time to get their operations up and running in order to provide said return on investment.

## Solutions:

- In the Caribbean there needs to be more collaboration and we need to be re-educated so as not to operate in silos.

- Vulnerable and disadvantaged groups need more technical assistance.
- We need to leverage technology as much as possible in education and training. A hands-on, practical, workshop approach was seen as another valuable option in terms of training.
- There are some programs that exclude the youth because they are seen as too young and this needs to change.
- It is vital to take a systematic approach to reintroducing agriculture in schools.
- The government needs to get involved to provide low-interest loans.
- It is important to form networks smallholders and provide them with advice and mentorship.

# <u>Group 2: Financing Sustainable Food Production and Innovation</u> (Facilitators – Stacey Alvarez de la Campa and Dr. Adrian Daisley)

## The topics of conversation were:

- In order to formulate effective strategies to gain access to financing, it is important to be aware that there is a strong element of protectionism and the market therefore we need to collaborate effectively as a region so that we can gain a foothold internationally.
- One of the ideas that came up was the need to appoint "Food Ambassadors" for representation in order to gain financing and penetrate mainstream markets.
- We need to focus on the profitability of indigenous foods, and promote these foods by raising awareness of their benefits. This can be done by hosting food fairs, which will increase visibility and help to gain financing.
- Adequate financing is crucial to help farmers deal with major challenges such as land preparation. Often, farmers co-ops cannot get financing because they have not thought about registering their businesses, and thus be eligible for grants to purchase heavy duty equipment.
- To gain access to funds, it is crucial that small farmers, smallholders and other stakeholders who are not mainstream get the help they need to formulate proper grant proposals.

#### Solutions include:

- In order to gain access to the funds that would make their farming businesses more profitable and legitimate and therefore gain greater visibility in the market, farmers need to invest in proper packaging and branding.
- Farmers need to regard themselves and their operations as a business.
- Farmers need to be willing to use technology in order to become aware of the financing opportunities that are available.

- There is a clearly a need for "Marketing Mentorship" to cater to the needs of those who are not in the mainstream of farming and food production. This will make them aware of the need to present an attractive product that will garner funding.
- The suggestion was made to look at Cuba it's a model of regenerative sustainable agriculture and use that as a package to present when seeking funding.
- Adequate financing will help us as a region to collaborate and stand shoulder to shoulder with the big players in the game. It is vital to be aware of the politics of food supply.
- It is also important for small farmers to collaborate amongst themselves and combine any necessary capital. The first step is to organize and get the conversation started, and to plant the seed, literally and figuratively.
- "Agricultural Activists" need to partner with farmers and ensure that their products meet the standards to secure financing. These products have to be of consistently good quality to meet the demands and expectations of consumers.
- Smaller and more marginalized stakeholders need to be encouraged to pool their resources to gain access to startup capital.
- Farmers might be more motivated to seek financing if they fully understood if they fully understood the value of their crops. These crops have enhanced value outside of the fresh farm market, because any produce not fit for consumption could be used for juices, chutneys, jams etc. Farmers therefore need to be even more aware of marketing and packaging standards, which would play a huge part in profitably using any produce not fit for the fresh farm market.
- There needs to be a focus on multi-lateral debt relief.
- Investigate the presence of angel investors and their willingness to partner with small farmers.
- Investigate the role of Official Development Assistance.
- The expansion of production capacity will stimulate financing if there is an increase in spending on SET (Science, Engineering and Technology), green investments, and climate change adaptation and mitigation.

## Group 3: Maintaining and enhancing sustainable food supply chains

(Facilitator – Issa Baisden)

- There is a need to look at the supply chain as a system for now and the future. We need to develop mechanisms that build capacity of all of the actors in a supply chain, their financial capabilities and business continuity. There is also a need to develop support systems that improves resilience and business continuity in SME capacity to manage supply chains, Helping SMEs apply international standards especially related to traceability of raw materials is critical. Funding should support farmers, SMEs in developing low carbon supply chains and also help in their efforts to apply standards that improve their resilience and continuity
- There is need to support farmers and processors to develop a culture of quality assurance, record keeping and traceability standards. To enable this there is a need to develop

mechanism and systems that support farmers and SMEs to embed a culture of quality assurance that supports enhancing documentation, record keeping, traceability and other issues relevant to food safety and sustainability. Mechanism such as grants support programs, low interest loans and other easy access incentives that help expand. There is need to review the reimbursable grant model and the dollar for dollar style of co financing in preference for other models that support greater accessibility by farmers, farmer cooperatives and SMEs.

- The role of middlemen and their impacts on the supply chain needs to be further assessed. Do they actually help and hurt the small holder farmers? Consumers? and the System?. Fair, and equitable compensation of producers must be part of the focus on building a sustainable and resilient food system.
- There is a need to engage in ongoing systematic assessment supply chain issues by key stakeholders together. Formal collaborative mechanisms that improve analytic capabilities, risk management and mitigation across the supply chain and food systems will make a difference
- There is a need for processors/manufacturer to evaluate their inputs, consider replacing foreign inputs where practicable and consider shorter/regional shipping lanes
- There is a need to build small holder farmers capacity to engage in contract farming
- There is need to develop capacity among actors in chain to see the value chain as a system and improve the interactions within
- Consideration should be given to temporarily stopping the import of fruits vegetables and foods that we could create effective supply chains for 1 group of products at a time. This would ensure we build local capacity (we understood that effort must also be put in by every actor along that supply chain to make sure it becomes effective as was done with chicken in Trinidad)
- There is need to develop a sustainable procurement regime that give preference to local and regional supply chain. This can support massive carbon footprint reductions in supply chains and make them more resilient
- Creating a school program that enhances knowledge, respect and the culture surrounding the use of local and regional fruits and vegetables, how their use benefits national and regional development in context of climate resilience. The program should also educate consumers on how the local fruits and vegetables are prepared and and used in different cultural context a of the different Caribbean Nations. The group was of the collective belief that this program could help create a future generation accelerate the regional integration process, stimulate innovation, boost regional trade, increase consumer preferences for local and regional products. Alongside sustainable procurement regimes the programme can support more resilient livelihoods for farmers and greater concentration of national and regional products in school feeding programs and improved integration of agriculture into the curriculum.
- Creating a body that would be able to work on behalf of all actors in a supply chain 1 supply chain at a time for example an inter island coconut supply chain body. Sharing of information and education along the supply chains is key. We proposed a public private partnership that could help to share that training, information, security and advocacy. This would also help to encourage proper farming by contract that would sustain the needs of hoteliers and other purchasers while protecting farmers from the middle men.
- Education and training was seen as the key way to improve the supply chain along with sharing information and communication. Technology can be leveraged across supply chains

- There is a need to support and encourage sustainable procurement and carbon tracking throughout all organization supply chains. Shortening shipping lanes, encouraging use of wider use gGAP, supporting suppliers that prevent as far as practicable deforestation, and reducing use of fertilizers.
- There is need for a system that supports sustainability focussed supplier development, selection and certification. There is a need to help support and encourage the development of sustainable purchasing, establish certifications and standards for all products that support the aim of reducing carbon emissions in supply chains
- There is need to develop a platform and mechanisms to help companies and players in the value chain to make decisions related to the carbon footprint of the supply chain. develop National and regional supply chain and sustainable procurement regulations that gives preference to lower carbon footprint and increasing resilience. This may be very complex, however in this complexity there is significant opportunity to decarbonize supply chains and make them more resilient and sustainable long term
- There is a need to examine the issues in the supply chain from all sides of the supply chain, both consumer and producer. There is need to explore ways that consumer relationships can help activate and transform markets. Opportunities in selling carbon offsets generated by small holder farmers for using climate smart and agriculture practices, bundled services, turning carbon tax into sales tax, finding opportunities to deepen collective supply chain action as opposed to individual companies in the supply chain. Finding new ways to look at and address scope 3 emissions in the supply chain is absolutely critical to a low carbon or net zero supply chain
- Connecting the issue of food to building codes, energy and water efficient development can go a long way to reducing emission.

#### Solutions include:

- Temporarily stopping the import of fruits vegetables and foods so that we can create effective supply chains for one group of products at a time. This would ensure we build local capacity (we understood that effort must also be put in by every actor along that supply chain to make sure it becomes effective as was done with chicken in Trinidad)
- Creating a school program to nurture an understanding of the culture surrounding each of the different fruits and vegetables and how they are used in different islands. We need to instill in future generations the desire to take advantage of the local vegetation by creating useful products. We want to create a system where some would be encouraged in the school feeding programs, but also the curriculum included teaching about the vegetation.
- Creating a body that would be able to work on behalf of all actors in a supply chain, one supply chain at a time. For example, an inter-island coconut supply chain body.
- The sharing of information and education along the supply chains is key. We proposed a public private partnership that could help to share that training, information, security and advocacy. This would also help to encourage proper farming by contract that would sustain the needs of hoteliers and other purchasers while protecting farmers from the middle men.

- Developing National and Regional Standards that drive sustainable procurement and reducing carbon footprint throughout supply chains. Promoting greater use and deployment of sustainability driven standards
- Deploying complementary actions to help eliminate (stop) or reduce emissions, remove emissions from the atmosphere should be executed be it nature based, engineered solutions, and or hybrid solutions which reduce the carbon footprint and intensity across national and regional supply chains.
- Improving the visibility and traceability of all organizations in the food system nationally and regionally is critical. This requires partnership and collective action from trade organizations, supermarkets, farmers, academia, consultants etc, Enhancing the ability to individually and collectively map the carbon footprints of suppliers throughout the supply chain. Standing National and Regional Committees should be convened for this purpose. This is a massive undertaking and may require cooperation, collectively deployed electronic platforms and analytic infrastructure to support.
- Monetize offsets to allow a flow of money to farmers and companies that are significantly sequestering carbon and reducing footprint. There is critical need to help all players establish base lines and to monitor intensity and impacts of operations. This is another reason that collective action and standards that can be audited and verified is required. Tools similar to the sustainability index used by WalMart in the US and its suppliers, An ACR Registry that incentives high quality offsets, can certainly support the CARICOM members states and the region to accelerate actions. Note offsets should be short to medium term strategy and used in context of facilitating a transition to a decarbonized or low emission supply chain

## Group 4: Accelerating climate-smart and resilient agriculture

(Facilitator – Riyadh Mohammed)

## Topics covered:

- As we get more involved into the Agriculture sector, it is clear that the focus should be on increasing productivity, efficiency, nutrition security and a better quality of life for all the stakeholders involved.
- As this production of nutritious food is one of three major long-term goals, the food producers are faced with satisfying these high demands in the midst of spontaneous changing climates, resulting in uncertainties of losses along the value chain.
- Producing food in a changing environment has major ramifications on the
  environmental health when waste and industry by products from the processes aren't
  disposed or utilized properly, which is inconsistent with the concept of a circular
  economy.
- In the dynamic world of food production, agile and safe decision making is needed more than ever to ensure a sustainable green supply chain with minimal disruptions.
- Climate change is affecting the rate and quality at which agriculture stakeholders are producing food, which can take losses up to 33% globally. The most at risk are, the

- low income and developing countries where the rural communities, women and youths have been severely neglected.
- In a positive scenario where food production and nutrition can be sustained, we must now ask ourselves, at what cost to our homes and environment should we produce this growing quantity of food? It is here that we must focus on the simple but effective triple bottom line model, which emphasizes on the performance of the social, environmental and economic indicators integrating the people, planet and profits into a synergistic framework.
- Climate Smart Agriculture (CSA) approaches are somewhat similar to, but very different from a set of guidelines like Good Agricultural Practices (GAP). These approaches can be applied globally, using each country as a separate model for the approach to be developed, as the conditions are different.
- CSA occurs on site (farm) and onto post-harvest operations and incorporates the use of many technologies, policies, agreements, and should also be supported by the educational and financial institutions and organisations.
- The management of resources starts at the farm level and usually includes integrated farming systems or to have a circular economy approach where outputs from one system acts as an input to invest into another system. It is at this level that Resilient Agricultural Practices (RAP) can be seen.
- Resilient Food Systems (RFS) stand out when the agricultural supply chains show continuous flow, less disruptions and are equipped to have agile responses to changes and uncertainties along the way.
- To add to the food production and nutrition security supply chain and system, sustaining a rural population and generating employment, education, training and development skills are also key components of resilient agriculture systems.

## Solutions to the points outlined above include:

- Improving water conservation through watershed management, better use of irrigation equipment and educational programs.
- Improving animal health and welfare through strategic breeding and selection, practicing integrated farming systems, implementing the use of bio gas digesters on slurry type waste farms and using precision nutrition and feeding strategies to lower emissions.
- Improving on soil health and focusing on the beneficial microbial populations and their synergy to impact the entire environment.
- Improving and updating existing policies on plant and animal wildlife conservation strategies as a means of supporting a healthier and more natural environment through biodiversity.
- Improving data management systems and information sharing systems to ensure a fair and up to date flow of research for all agriculture stakeholders. This initiative also stimulates much beneficial dialogue and provides feedback to focus on relevant areas of research and development.

- Improving on biomass conversion, sustainable waste management and investing in energy efficient technologies to lower the total dependency on commercial monopoly type energy sources.
- Improving on the research and information of agrometeorological work done by several organisations to increase the chances of healthier food production, less wastage and a higher chance of managing climate risks in agriculture.
- Improving on the genetic selection of higher producing varieties of crops and breeds of livestock, to ensure more nutritious food, as well as relating these techniques to more conservation type agriculture techniques.

## <u>Group 5: Issues in the food, water, energy, waste and digitalization nexus</u> (Facilitator – Desiree Valentine)

The discussion covered the following topics:

- Food waste is a global problem. If crops do not meet some idealized standard, then food gets left behind. How do we change perception of consumers and just take food and turn into something wholesome to eat. Food waste contributes to significant emissions and achieving net zero requires a priority focus and attention be given to food waste and its treatment Food waste is often a problem because crops don't meet an externally determined, idealized standard.
- In the Caribbean, food waste presents a different scenario from what we see in Europe, for example, because we have seasonal food and fruit. In our region we battled the perception that or locally grown food and produce is "not good enough". We have to change this perception and market or own food in a way to make agriculture an attractive option.
- We have to find a way to harness or limited resources in terms of food, water, energy, and waste. There is an opportunity to deploy circular economy principles, models and concepts that help embed the systemic nature of this nexus into our actions.
- In the Caribbean food waste different. In the region we do have waste as we have seasonal food. We need to find ways to conserve that waste. We need to market and change our indigenous populations' perception on locally grown food. This should solve some of the issues. We can be successful if we do.
- Greater intra-island participation to reduce waste, to assist with islands that don't have the land space. Designate certain islands/caricom states to be food baskets. Have a regional standard in terms of food, so that there are no problems in terms of intra-island importation/exportation.
- Reduce imports of foreign fruits and promote locally grown substitutes.
- Question: Water-Energy-Food Nexus is about the interconnectivity of these systems. All of these systems are finite. How you think we can deal with the challenge of finite resources? What are some strategies on an individual, local, regional level?
- Resource harvesting there should be no issue as it relates to lack of water. It is inconceivable that islands have to import water. We are not using technology to harness and harvest resources. We need to make use of more technology. Water harvesting is a key issue as such. In relation, we need to do more with less. Vertical farming with high rise is a solution to limited land space. Butterfly and bees

- harvesting is a possible solution. SETAM (Science, Engineering, Technology, Agriculture and Marketing) is the way forward.
- We not using what we have (natural resources). Make use of our natural resources. Use solar energy and reserve energy for other things.
- There is a need to invest in and support greater deployment of energy and water efficiency technology. Global funds and grants should target and support investments that address the nexus
- The circular economy models and principles and opportunities will be critical in navigating and addressing issues across the nexus, It would be critical to address need to reduce emissions, the need to address soil health, food and to assure that waste is managed in a more regenerative, sustainable and appropriate way. Food waste provides many opportunities for circularity and should also be a focus of investment
- A significant emphasis should be placed on regenerative agriculture techniques, agro
  forestry and generating the data on the carbon sequestered from trees in agroforestry
  projects that promote the reforestation of indigenous trees and the conservation of
  indigenous species and biodiversity. Nature based climate solutions will be critical to
  protection of water ways, reduction of carbon and conservation of water and energy
- Connectivity should also looked at as a sustainability issue and the impacts of e-waste on the food system should
- There is need for standing regional, national standing committees and working groups focussed on addressing the ongoing issues arising from the NEXUS and there should be flexible pathways for accessing financing to address these nexus issues
- Stronger action to protect natural waterways and governance of the commons (rivers, seas and other aspects of the natural environment) is needed and mechanisms for improved and sustained governance need to be implemented that support
- we need nature based, biological, engineered, hybrid and semi engineered solutions that help to reduce emissions in the design and the various assets and all stakeholders need to work together to protect and engage in asset management
- There are many opportunities in the nexus to develop sustainable livelihoods. Addressing issues in the nexus would support climate mitigation, adaptation, community resilience and building social cohesion
- We need to design partnerships that are deeper and more profound than participation. We need to evolve mere citizen, CSO and private sector participation from one off events to ongoing entrenchment into the decision making fabric and process at national regional international. There is a need for new platforms and fora to examine these issues with different lens and flexible arrangements to impact on communities. We must find ways to allow communities to influence sustainable actions that affect their lives
- There is need for an increase focus in agroforestry, as the practice reduces water utilization and improves yields whilst using less energy from utilities
- Wider use of urban farming techniques that build on the circular economy concepts and models in water, energy and waste utilization. An increasing emphasis on green infrastructure, eco building design and utilizing eco friendly construction can help

- connect city development, energy conservation, water conservation and improved waste disposal etc
- There is need to accelerate national, and regional action on standards for small and sustainable cities and communities such as ISO, LEED, Living Building, IWA and others promoting eco design concepts that integrate and promote greater use and application of integrated designs that manage the interaction in the food, water, waste, energy and connectivity nexus. There is a need to establish national and regional coalitions and partnerships that promote and implement actions on these standards
- There is a need to develop a national and regional, informal and formal, systems/mechanisms/processes that support ongoing engagement and partnerships of interested parties such as CSO, academia, private sector, international donors, national and local governments in planning, implementing, studying and improving actions, interactions and impacts addressing food, water, energy, waste and connectivity nexus. These should also be the subject of climate finance and have flexible routes that enables CSOs and communities to take actions at the grass root level and at scale, It was felt that bureaucracy is the enemy to sustainable development, the enemy to quality and the enemy to accelerated action. Mechanism must create flexible pathways, have interactive processes and include risk management mechanism that include ongoing relationships, quality enhancement, coaching and partnerships that address concerns in governance and quality assurance in implementing entities
- There is need for national and regional systems that promote circularity in all sectors and advances action on the nexus issues
- CARICOM Secretariat?agencies and governments on national and regional level needs to be supported in designing, building and maintaining robust quality assured collaborative governance and implementation mechanisms and relationships that go beyond participation approaches to deeper, more profound partnerships with the CSO, Private Sector, Academia, Farmers, multidisciplinary, multisectoral, multinational, multiagency, multi donor actions that address these nexus issues. Mechanism that support systemic actions across the entire ecosystem and with appropriate methods to monitor progress, communicate, learn and support, These mechanisms need to include communication systems, integrated risk management, ongoing relationship and trust building, knowledge sharing and connecting stakeholders to take individual and joint action on nexus issues
- There is need for a systems approach that allows partners and actors in the network of action to plan, implement, learn together, improve together and continue acting together.
- There is need for wider deployment of sustainable technologies in utilities, such as the integration of solar, wind and other technologies that support the reduction of the Carbon footprint in the Utilities itself.

Solutions include:

- Implementing Standards and Green Building Codes that support sustainable community and city development and the integration of issues in the food, water, energy, waste and connectivity nexus
- Diversify the water and energy mix. Promoting and advancing mechanisms aimed at minimization, maximization and conservation. In the case of water opportunities to engage in rainwater harvesting, groundwater and surface water management, recycling of water for parks and buildings, stormwater management, Brachich Desalination, innovations in greywater and waste water purification and treatment should be researched and explored for the affordability and sustainability
- In the case of water, increasing investment into community based and or consumer driven programs to reduce /stabilize demand for water and energy should be widely utilized nationally and regionally. Fixture replacement programs, Standards, Codes and Mandates, Providing Financial incentives and technical assistance for energy and water efficient innovation deployment at the consumer level
- The wider use, incentive and support for precision agriculture, vertical farming. aquaponics and sustainable practices that leverage the food, water, energy, and sustainable waste management nexus
- Working with partners to develop alternate water and energy sources. Finding opportunities for use of Blackwater, Greywater, Rainwater, Stormwater utilization, Water treatment at the home and community level that help address the food, water and energy nexus. These areas should the subject for Green Climate funding and subject of Climate Risk Resilience and Abatement Planning Programs and Interventions, These should address issues in wastewater, energy, cover capacity building of personnel, upgrading materials and equipment and process development and quality assurance
- Adopt a Coordinated Approach to collecting and deploying climate related data
  applicable to utilities, research communities and communities facing climate risk that
  affect the nexus issues addressed in his section. The approach need to be flexible,
  proactive and robust in assessing and managing current and future needs of the critical
  infrastructure and assets that support these nexus issues
- Increase investment and deployment of water and energy conservation, generation and distribution innovation programs such as leak detection, Atmospheric Carbon Capture where feasible, decentralized, centralized and onsite water treatment, Grid to Vehicle, Vehicle to Grid Energy Generation, Microgrids
- Wider deployment of Community Networks (provide free wifi to rural farming communities)
- The wider use, integration and implementation of sustainable technologies and climate smart and resilient strategies in food systems.
- General Comments
- Five affinity areas highlight the essence of the discussions
- a. BMAP Branding, Marketing, Advertising and Promotions. b, MAS The need to Make Agriculture (Sexy) i.e making food systems an attractive and viable career option with adequate support to enter and flourish, c. focus on STEAM not STEM Science, Technology,

- Engineering, Agriculture and Mathematics, and d. Appreciate Systems and recognize the system includes the future and e.. In substantial and sustained ways implement and continually improve upon the following 5 pillars a. Collaboration, b. articulation/recognition, c. standardization, d. harmonization and e. rationalization.
- There is need to emphasis need to evolve from participation to partnerships. The need to develop capacity to sustain partnerships throughout system and improve interactions. The need to not see partnerships as an event and to enshrine as part of ongoing process with framework for implementation by all stakeholders by design etc.