



Kiribati Game-Changing Pathways Now and Into 2030 and Beyond

“Transforming the Kiribati Food System Towards 2030 - making it Stronger - Equitable - Healthier to I-Kiribati & Friendlier to Kiribati Atoll Environment.”

1 Country Background

Kiribati is a nation of waters with its 33 atoll islands spread out across the vast Kiribati EEZ of 3.5 million sq.km spanning the distance of 4,561km from its furthest east to west with a total land mass of 823 sq.km. Its total population of 120,000 is unequally distributed with 53% dwelling in the capital Tarawa while rural population of 57% is dispersed unevenly on the 21 inhabited islands ranging from 10,000 to 50 people. One can imagine the geographical vastness and remoteness of islands which pose significant challenges of service provision and market access.

2 Kiribati Economy

Kiribati's local economy is dominated by the public sector. At present the government recurrent budget is equivalent to over 60% of GDP. Development assistance amounts to 35% of GDP, the second highest in the Pacific. Major sources of revenue are income from fishing licenses, exports of copra, worker remittances and tourism. Income from fishing licenses increased significantly from AU\$147 million in 2016 to AU\$226.3 million in 2019 - an increase of 53% or almost US\$1,900 per capita.

3 Kiribati Geographical Formation

Like any other atoll islands, Kiribati islands are made up of low-lying coral islands that lack volcanic or continental rock in their surface geology. An exception is the raised small single limestone island of Banaba or Ocean Island in the central Kiribati. The rest of the islands are semi-circular, few are circular, in shapes and are surrounded by reefs and lagoons. Some islands do not have lagoons and are just low reef islands, rarely more than a 3 metres above sea-level that consist mainly of loose rubble and sand. These small fragile atoll island environments are susceptible to events that for larger islands might be relatively minor episodes. The atolls are especially vulnerable to cyclones, droughts, and the effects of sea-level rise and El Niño–Southern Oscillation (ENSO) induced extreme tides.

4 Kiribati Dietary Pattern

Kiribati main protein source is fish and has a consumption of 75-205kg per capita - one of the highest in the world. Fish in its rich varieties is consumed mainly with imported rice and wheat flour which have now become the mainstay food for



Kiribati. These products are appealing and quickly gained their prominent position in the Kiribati diet due to their many advantages when compared to the local staple food crops of coconut, breadfruit, and *bwabwai* (giant-taro). They are cheaper in feeding a family, easier to prepare, use and store, and have higher concentrations of carbohydrates though more energy dense, significantly higher in sodium, but contain virtually no vitamins A and C.

5 Kiribati Nutritional & Food Security Profile

There is a long way to go to address the issues of food and nutrition insecurity and poverty. Around 8% of the people are undernourished, 22% live below the basic needs poverty line, and 41% are undergoing moderate or severe levels of food insecurity. In terms of daily consumption; there is 12% food consumed away from home purchased or received as free meal, 10% of food received as free and consumed at home, only 12% of food (fish and coconut but contribute 61% of total dietary energy coming from own production), and 67% is imported food cereals purchased and consumed at home - 59% of this provides dietary energy¹. The dietary pattern as presented in this Food and Nutrition Security pose major challenge to Government in realizing its own Kiribati 20-Year Vision (2016-2036) where the human capital is one of the top pillars - “to develop the natural, human capital and cultural capital to improve economic growth and reduce poverty”.²

6 Kiribati Pressing Issues & Risks

a) High Cases of Non-Communicable Disease & Premature Deaths

The Government of Kiribati through its Ministry of Health and Medical Services is baffling the rising numbers of NCD cases, stunting among children and the high mortality rates of children under 5 years - standing now as almost 50 infants out of 1,000, about 80% of the entire population suffers from obesity and 98% which are the next NCD candidates, and currently Kiribati hospital centers are filled up with NCD cases while in almost every household there is at least 1 case of home-stay NCD case either or not on medication.

This is the highest risk now facing Kiribati and while the major cause lies in the poor nutrition intake, there are contributing factors much attached to nutrition - low awareness on over-eating, lack of physical exercise, having the behavioral habit of smoking, much drinking of alcohol and kava - high intakes of sugary drinks and salty foods.

b) Poor Agriculture

¹ FAO Kiribati Food Security Profile 2021.

² Kiribati 20-Year Vision 2016 - 2036



For agricultural, more than 40 per cent of Kiribati's territory is dedicated to agriculture, with limited possibilities to expand or shift agricultural areas. Kiribati has very limited agricultural resources: soils are sandy, porous and shallow, alkaline, low fertility and very low in organic matter content, which limits vegetation-types and severely constrains agricultural potential. Freshwater resources are mostly fragile shallow freshwater lenses that are susceptible to salt water intrusion due to over-extraction, drought and sea level rise. Other challenges faced by farmers are the narrow genetic base, pests and diseases (crops introduced from other countries are particularly susceptible), the cost of farm inputs (transport costs are very high), weak technical support, and loss of traditional knowledge.

Apart from coconuts, most agricultural food production (crops and livestock) is at a subsistence level, with most food being imported for the urban population of South Tarawa. Major food crops are breadfruit and giant swamp taro. Imported food is costly to transport to small island communities, and, as demonstrated through previous IFAD investments, there are opportunities to produce more food for local consumption.

Artisanal fisheries have traditionally provided people with the bulk of their protein intake as well as some cash income, and most households in the outer islands are engaged in fishing or collection of other marine products. This food source is under threat, with some important species being over-fished.

Given the extremely limited land availability, poor soil and intense periods of drought, domestic food production in Kiribati is limited. Accordingly, the population depends heavily on marine resources for their food, nutrition (and micronutrients) and livelihoods. At the same time, a significant part of the I-Kiribati food also comes from imports, which constitutes an unreliable and often nutritionally poor source of food. Recent urban development and migration has also increased market demand for fish, as a result of which near shore shallow water habitats have degraded significantly including through drivers such as over-exploitation of coastal resources in many of the islands. Though there are no clear statistics, anecdotal evidence indicates that coastal fisheries, a vital source of protein and nutrition, are severely impacted in many areas.

In Kiribati, land and marine ecosystems are intrinsically linked. The poor state of coastal resources is also often connected with ongoing land degradation, pollution, and other related factors. Removal of mangroves has resulted in a deterioration of coastal habitats compromising ecosystem resilience. Fires and land clearing for planting of coconuts, have severely degraded land on the islands. Conversely, Kiribati is only affected 3 main pests: taro beetles, mealybugs, and rats, and tilapia. Limited land productivity dents opportunities to increase benefits from local food production through agroforestry initiatives. A key behavioral



factor in resource depletion and habitat degradation is the lack of community ownership/engagement in management decision-making processes and, as a result, limited empathy with consequences associated with poor farming and fishing practices. This, coupled with limited opportunities for livelihood diversification, fuels a continued decline in readily accessible natural resource areas.

c) Climate Change Risk & Vulnerability

Kiribati has been a keen advocate for climate action at the global level, highlighting that the future of this low-lying country is at immediate risk due to the effects of climate change. Climatic change will continue to challenge key drivers of economic development in Kiribati. Tourism and agriculture together account for a dominant share of overall economic activity (contributing 29 per cent of GDP) and are both sectors dependent on natural resources, highly vulnerable to climate change. Climate variations that are expected in Kiribati during this century are increased air and sea surface temperatures, increased rainfall, more days of extreme heat and rainfall. Climate change will result in sea level rise (estimated 0.2-0.4 m by 2050), storm surges, inundation and coastal erosion, and droughts, mangroves and coral reefs degradation.

Kiribati however, as stated in its KV-20, stressed that in order to reduce vulnerability to climate change, Government will continue to implement and build on existing policy measures towards building adaptive and mitigation capacity, particularly of the most vulnerable people. The policy measures will also reduce exposure or sensitivity to climate impacts. In addition, Government will mainstream climate change adaptation and mitigation through development and effective implementation of strategies that fully integrate climate change concerns into various programmes, to ensure that the working environment is sensitive to climate change and sustainable development given the over-reliance on tourism and fisheries sectors which are highly vulnerable to the impact of climate change. Sufficient technical capacity and human resources to successfully mainstream climate change adaptation and mitigation measures will also be heightened for effective implementation of climate change related adaptation measures. Government will improve its capacity to access and utilise the existing Climate Finance Mechanisms. Government will also undertake an evaluation of risks to poverty reduction activities associated with climate variability and change, and identify effective, efficient and equitable adaptation measures to reduce those risks and harness opportunities for building adaptive capacity for greater and more sustainable development for all.

d) Poverty & Hardship in Kiribati

Rural communities, historically accustomed to facing adversity in relative isolation, are experiencing even more hardship and insecurity as they are



increasingly affected by both climate change and an increasing need for cash to buy food, fuel and other necessities. Fresh water supplies available to the outer islands households are already fragile and a government priority. Households generally rely on open wells for domestic water. These are now often polluted, having an increasingly negative impact on health, especially for women and infants. Food production is also adversely affected by irregular rainfall patterns, with more and more food being imported.

e) Women & Youth

Women and Youth face particular hardship. Decision making at the community and household levels is dominated by men, especially traditional male leaders. In the outer islands women have multiple tasks (household work, water collection, home gardening and crafts and child care) and youth face significant challenges with finding employment and access to opportunities and services, creating social issues with a young and rapidly growing population. With a significant proportion of men migrating to find paid employment, many households are female headed. According to UNDP, about one-in-five households nationwide are headed by women. The outer islands have a high number of abandoned wives. According to data from Kiribati's Ministry of Interior and Social Affairs and the National Statistics Office, 68% of women between 15 and 24 years of age have experienced physical or sexual violence, often at the hands of their partner. Factors contributing to this violence include travelling long distances from home (such as to fetch drinking water), men's attitudes to prescribed gender roles, jealousy, and alcoholism. Lack of financial independence often prevents women from leaving abusive husbands.

In responding to this inequality and hardship; Government in 2019 introduced the Social Benefits programme which monthly financial assistance to all unemployed youth in the ages of 18 to 59. Also a fortnightly grant is provided to all elderly starting from the age of 60 years old. The disabled people are allocated financial assistance on monthly basis. With the KV20 main them on "Leaving No One Behind", government hopes that the unemployed and the disabled will find a way to start up their own businesses and to support their development endeavors, and the elderly will have the means to buy healthy foods and other needs.

The Social Benefit programme is new and its impacts will never be seen in the short run but as time goes and in the midst of the rising issues of unemployment, poor health quality, and increased population; the beneficiaries of the programme will eventually realize the importance of the financial assistance - to help them rise above poverty and hardship.



In July this year, 2021, a 5-day National Food Systems dialogue was conducted where all key food actors and Government Ministries came together to share their views, experiences, issues and hopes for improvements in the national Food Systems. This dialogue was two-fold in purpose - a) to examine the current situation of the Kiribati Food Systems through the provided tracks of Nutrition, Diet, Nature, Livelihood, and Resilience with a specific goal of seeing the shortfalls and gaps and b) to ponder on practical ways to address these shortfalls and fill in the gaps in the manner that is practical, affordable, realistic, and time-bound.

It is from this event that Kiribati was able to gather three broad game-changing pathways that are identified as doable and are able to strengthen the Kiribati Food Systems - making it stronger, equitable, and safer to people's health and Kiribati fragile environment.

It is also in this dialogue that it was agreed that a Kiribati Food Systems Task Force be established to guide and coordinate the identified food actors as they implement the activities relevant to them in the pathways. In the dialogue, the key actors were also identified and they shared their readiness to embark on the pathways most relevant to them.

In early August 2021, the Ministry of Environment, Lands and Agricultural Development submitted a Cabinet Paper - requesting Cabinet's approval to note and accept the three pathways and to approve the establishment of the Kiribati Food Systems Task Force. In early September 2021, Cabinet has noted the National Pathways but is yet to approve the establishment of the Task Force which is expected to oversee works on the 3 broad pathways. Attached as **Appendix 1** is copy of the Task Force Terms of Reference.

8 Game-Changing Pathways

Now that Cabinet has approved these three pathways with its 17 major activities; Kiribati has now hopes to see the positive change and improvement in its Food Systems. The fact is that these pathways are not new as food actors and relevant Government Ministries are already working and covering them in their existing programmes and operations. Their focus and objectives are however clearer than before which may require stepping up of programmes and their budgets. With Government support; Kiribati is hopeful to accelerate works on the pathways not merely to meet the UN-Sustainable Goals and the KV20 but more so in addressing rising and pressing problems of malnutrition and NCDs and environment degradation in Kiribati.

These game-changing pathways are expected to deliver results that will improve the health quality of the Kiribati people and restore the integrity of Kiribati atoll fragile environment.



A. Healthy Population - Our Shared Responsibility Pathway

There are three broad activities under this pathway:

(1) Curriculum development to Support Nutrition, Home Gardening, and the School Lunch Programme:

The activities under this pathway are to focus from what is recognized as the 'right starting point' - the children of Kiribati. Currently there is more than 80% of obese cases which means this has the momentum to affect Kiribati adult population even beyond 2030. These pathways therefore are targeting the young people - to save them before going into the same trap of poor nutrition. Government through the anticipated Food Systems Task Force will keep on monitoring performance of actors working on the Nutrition, Diet, and Nature Action Tracks and to provide the necessary adjustments to ensure the pathway really works.

- i) Ministry of Education is the leading Agency for this pathway and to be supported by Health, Agriculture, and Fisheries;
- ii) Curriculum: Healthy Locally Produced Foods & Home Gardening Curriculum. National Curriculum Unit is to develop this with feeds from Nutrition, Agriculture, Fisheries, and Environment. The check on teachers availability and capacity is essential to ensure the planned curriculum can actually be taught throughout schools in the country after its completion;
- iii) The curriculum needs to include school garden programmes in hopes to support the School Lunch Initiative. Government has decided to provide free lunch to all school children in the country once all arrangements are completed.
- iv) The curriculum needs to cover issues of vitamin A deficiency, the high mortality rate of children under 5 - highest in the region (almost 50 out 1,000) and the high NCD cases of 70% of the total population. It is important for students to learn all ill-effects of poor nutrition, the sad situation Kiribati is now in, and to learn ways to escape this health disaster;
- v) Also the curriculum needs to factor the farming and fishing methods that are destructive to nature - land and reef system. It is also important for students to learn all these destructive practices so they can view the world differently and be part of the solutions;
- vi) Home and school waste management to be included too in the curriculum. The waste separation and usage of food wastes in school gardens and home gardens should be factored in the curriculum;
- vii) Linking the Nutrition curriculum to Home Gardens. The home garden component can be included as part of the Internal Assessment for students. This is important for food and nutrition security in homes. Parents, through the School Committees or Parents Teachers Associations (PTAs) need to



- understand and appreciate participating in this programme as their way to support their children's school work;
- viii) If there are no teachers available, a Training Plan needs to be developed but bearing in mind Kiribati's own capacity to teach these topics using available human and material resources from Nutrition, Agriculture, Fisheries, Environment divisions;
 - ix) Coordinator of National Curriculum and Directors of Health, Agriculture, Fisheries, and Environment to form their working committee to draw work plan, timeline and costing of the entire work;
 - x) The planned Kiribati Food System Task Force (KFSTF) to oversee, monitor and evaluate progress of work on this pathway.

(2) Setting the workable Nutrition Standard across all institutions:

Lifestyle changes in Kiribati with more people tend to dine out on work-week days, parents give lunch money to their children so they eat in schools, and more people go to restaurants for a change in food. The Chinese foods seem to be favoured most by the people as most restaurants in Tarawa are operated and owned by Kiribati Chinese. Now with the issue of poor nutrition there is a pressing need to regularly check on the quality of foods served in these eating places. Regulations and Acts need to be enforced in controlling the ingredients without nutritional values.

Also food vendors on the roadsides and in schools need to be regularly checked to ensure that the foods served are nutritionally healthy and hygienic in handling and preparations. This activity under the **Healthy Population - Our Shared Responsibility pathway** extends to cover foods served in hospitals and other institutions - to ensure nutritious foods are served at all times.

- i. Ministry of Health and Medical Services (MHMS) is a leading agency on this important pathway and would be engaged in reviewing its Nutrition Policy, Food Safety Act, Food Business Licence conditions;
- ii. The practical activities will involve review of menu and setting strict standards on foods served in hospitals and boarding schools and finding a way for these institutions to take more fish against canned foods, count in local taro as alternative to rice, breadfruit, pandanus cooked products, boiled toddy and toddy syrup rather than imported sugar and eggs;
- iii. Setting a strong standard on types of foods to be served besides roads, in schools, in public events, ensuring that the food they sell is hygienically prepared and handled, it is nutritious and balanced;
- iv. Public awareness on the new legal requirements needs to be continuous;
- v. Regular inspections and surprise-inspections carried out to all road food vendors, school food vendors, restaurants, catering service providers;
- vi. Develop working link with Head of Churches so they help campaign the health benefits of eating nutritious foods;



vii. The KFSTF to oversee progress.

(3) Revival of the Fruit Processing Plan in Support of Vitamin A National Campaign:

This pathway activity has an interesting beginning way back in the mid-2000s when a Dr. Lois Engleberger, a nutritionist from Arizona University did a study on Kiribati fruits with the funding support of the Secretariat of the Pacific Communities (SPC). She visited Kiribati and did her research on banana, breadfruit, and pandanus fruits to check on their nutrition content. In her research she came up with a very rewarding finding when she found out that pandanus fruit has the highest carotene content - higher than carrot and tomato. This fruit, after pasteurizing will provide high beta-carotene - so rich in vitamin A which is the most deficient vitamin in the country.

Due to pandanus health benefits, FAO, SPC and Government that time decided to set up a processing plant with a focus of producing pandanus nectar and paste for children's drinks and foods. The research also identified the varieties of pandanus that carries the highest vitamin A. The processing plant was installed with the financial support of the FAO and SPC as a trial. The products were even scientifically tested in Geneva, Tokyo, and Taipei and they all produced the same results that it certainly contains high vitamin A.

However due to the bad location of the plant and its high start-up capital; the project was left idle to this day. New ideas were formulated by the Agriculture in reviving the project and placing it in a location closer to the port. These ideas were also discussed in the National Food Systems dialogue and all agreed that for the issue of Vitamin Deficiency; this pandanus processing project needs to be quickly revived.

- i. Division of Agriculture and Commerce are the leading actors of their own sectors in this pathway;
- ii. Agriculture to do the capacity stock taking of pandanus tree in the country;
- iii. Following ii) a replanting scheme is to be implemented - to mass produce pandanus cultivar that carries the highest vitamin-A (carotene) content nationwide and other varieties as well;
- iv. Determine in the short term the supply capacity so to able to start the processing that will increase in capacity as supply increases;
- v. Develop plans for other cultivars as they do remain carry high vitamin-A compared to other local and imported fruits;
- vi. Develop plans to process other fruits like breadfruits, pawpaw, banana, pumpkin, and fig fruits;
- vii. Set the requirements to guide selection of supply from outer islands to minimize or avoid wastage?



- viii. Identifying the best location for the Fruit Processing Plant close enough to port in Betio;
- ix. Ministry of Commerce to focus on the commercial side of the plan - to develop the Business Plan;
- x. Develop packaging and labeling;
- xi. Develop marketing strategy for the Processed products - locally and overseas;
- xii. Funding is the main setback so solicitation of potential donors is important;
- xiii. Put in place the emergency options in case the Covid-19 disrupts all of the above.

B. Access to Blue & Green Foods in the Country Pathway

There are two broad activities under this pathway:

(1) Ministries of Agriculture and Fisheries to Provide the Rightly Sized Support to Farmers & Fishermen in the Outer Islands:

This is where the Ministries of Fisheries and Agriculture are committed to step up their ongoing programmes in hopes to increase access to blue and green foods in the country. This activity is to be carried out within the scope of five Action Tracks.

Currently the Ministries of Agriculture and Fisheries are engaged in providing support to farmers and fishermen in the outer islands as well as in the capital Tarawa. However, this pathway singles out the specific areas that need immediate attention, focus and commitment - in hopes to accelerate and improve local produce and fish catch in a manner that is sustainable and friendly to the physical environment.

- i. Agriculture and Fisheries to lead their sectors in this one broad and complex pathway with technical support at later stages from the Environment division, National Disaster office, Commerce, the KCCI, and the Nutrition Department;
- ii. Identify key issues to be addressed like the type and quantity of planting materials, farming tools, and fishing gear to distribute to communities in all of the outer islands;
- iii. The priority of islands in terms of their vulnerability needs to form the order of distribution taking into account water scarcity and islands where food security is mostly affected;
- iv. Where water is the main setback, the proper solutions with resources need to be secured like distribution of island-friendly water systems;
- v. The outer island nurseries need to be fully equipped with technical support materials, planting materials of both exotic food crops and traditional food crops - to ensure the available support to all farmers at all times;
- vi. The outer island fish centers need to be rightly stocked with the technical support materials and fishing gear so support to fishermen is ready at all times;
- vii. Law enforcement (Environment and Fisheries Acts) need to be stepped up in this pathway to ensure the safe farming and fishing practices;



- viii. Capacity building on the marketing and business aspect of fish and agricultural produce. The right level of support is to be provided like having proper storage for produce and fisheries products, dedicated island transport to mobilize produce and fish products from farmers and fishermen to their respective storage;
- ix. Sea transport to move the produce and fisheries products to the Tarawa market;
- x. Setting up of the Revolving Funds to pay for local produce & fisheries products in the outer islands - in a timely manner. This favourable commercial element will become a flavour to encourage farming and fishing activities.
- xi. Setting up of the Tarawa market to sell the outer island produce and fisheries products;
- xii. Alternatively, if funding is an issue in setting up another market; the Ministry of Commerce with the support of the Kiribati Chamber of Commerce & Industries (KCCI) to make arrangements to receive the outer island products and to sell them in Tarawa supermarkets;
- xiii. In this arrangement, considerations need to count in the Tarawa market and vegetable vendors. Those who do not want to be included but to continue their roadside markets; this is fine. This arrangement is also geared towards creating market competition in Tarawa with aim to possibly lower the prices of local produce which are very high at the moment;
- xiv. Ministry of Health to further improve menu for the patients and care-takers - to include local products like fresh fish, vegetables, toddy drinks, panadanus, pawpaw and breadfruits (when they are in season);
- xv. This pathway is to be aligned to support the School Lunch Programme in the outer islands and in Tarawa;
- xvi. Work with farmers and fishermen on best price structures so local produce with increased production can compete their imported rivalries. Setting price the raw produce in outer islands and in Tarawa needs t be properly adjusted as support comes in and as production increases. This is critically important insofar as encouraging farmers and fishers to increase production, and at the same time setting the right price affordable and competitive to the imported foods;
- xvii. Aside from the main markets; this pathway needs to find ways to encourage households to set up their own gardens and to eat local foods. A mechanism that is cost-effective and practical to be devised to encourage households to participate;
- xviii. In support to xvii) Public Awareness programme needs to be developed to convince homes and communities on the high health risks of eating non-nutritious foods and to present the current high health risk of NCDs that is now inflicting our population and economy;
- xix. In support of using proper and climate smart farming and fishing techniques continuous training and public awareness programmes need to be stepped up;
- xx. Public awareness programme needs to continue too on how to utilize home wastes in home gardening;



- xxi. On piggery and poultry, more technical support is needed to ensure practices that are friendly to the fragile environment. This exercise will also be included in the above-mentioned public awareness;
- xxii. Putting in place the emergency options in case Covid-19 and other major disasters disrupt food security and all of the above?
- xxiii. Two working committee to be set up for Agricultural Support and for Fisheries Support - one to focus on Agriculture and the other on the Fisheries;
- xxiv. The same 2 committees to also look into marketing side of the local produce and fish products in the outer islands and in the capital;
- xxv. The KFSTF to oversee the progress of these two working committees and to unite their works where necessary so efforts of the two can complement each other especially in the areas of local produce mobilization, transport, and marketing.

(2) Enforcement of Fisheries Acts surrounding Harvesting & Value-adding Initiatives:

Kiribati is a nation of waters! Most of I-Kiribati protein intake is fish extracted from the lagoons and ocean. The ocean and marine resources have great potential to feed the people of Kiribati and the world now and into the future. The problem however is in the destructive practices used in the harvest. The increasing market demand, especially in the capital, has accelerated aggressive fishing with less thoughts on the dangers posed on the reef system and over-fishing on certain species of fish.

The National Food Systems dialogue recognized this danger and see the urgent need for law enforcement so destructive and aggressive fishing methods are banned and spawning seasons of reef fish is observed especially in Tarawa, the capital, where more than 53,000 people live. The aim is to protect the fish habitats and to extract fish in the manner that it meets to the fish ability to replenish or restock itself. The main objective of this pathway therefore is to ensure that people of today and children of tomorrow will continue to strive with the protected marine resources.

On value-adding, Kiribati with its rich marine resource has great potential to do value-adding of fish and seaweeds. Government needs to provide the right level of support in this area so more benefits can be drawn from the marine resources. It would be good too to handover this activity to the private sector once time is ripe.

- i. Min of Fisheries to lead works on this pathway. In fact Kiribati has bigger future and stronger food security with its vast EEZ compared to Agriculture and this is important to note in realizing this pathway;
- ii. Checking the inshore fish stock capacity to ensure it will continue to meet the rising demand of the increasing population especially in South Tarawa?



- iii. More Public awareness to run in parallel with enforcement in fishing seasons and fish sizes together with use of fishing gear friendly to the marine environment and to the stock;
- iv. Currently Fisheries is moving ahead already on this pathway so best for Fisheries to state which areas of activities in this pathway that needs to be included and stepped up in terms of more resources;
- v. On value adding programmes Fisheries to accelerate its tuna pouching initiative and also to start value-adding on other marine products like seaweed and fish jerky products and snack. This is important pathway to provide another protein and vitamins D and B12;
- vi. Exploring potential value-added products for export;
- vii. Exploring market link with local feed producers on the use of fish rejects and waste;
- viii. An emergency plan needs to be ready in case the Covid-19 or other major disasters disrupts implementations of all of the above.

C. Affordable Healthy Foods Pathway

There are two broad activities under this pathway. While this pathway is closely related to **Access to Blue & Green Foods in the Country Pathway**, its special focus is improving local food trade and in reducing high food imports.

(1) Review of the Special Food Levy Act so more local produce and fish products can reach the Tarawa market:

The main purpose of the Special Fund or Food Levy Act is to standardize the price of foods throughout Kiribati. Kiritimati island in the Line Islands has a special case since it is more than 4,000km away from Tarawa so the imported foods sold on this island cost more than the rest of Kiribati. Also with this Fund, the price - mainly freight costs of local foods listed in the Act are to be subsidized when moved from outer islands to Tarawa. The fund is accessible by middlemen who import produce from outer islands for commercial purposes. Also this fund is accessible to transport operators to compensate the freights of these local produce. The main objective here is to encourage food trade between the outer islands and Tarawa.

Currently, the funds specific purpose is to encourage internal trade. This fund however is always underutilized due to cumbersome procedures and requirements in accessing them. At the same time the claim procedure is in secure as there is no check point on the exact quantity of local produce moved from outer islands to Tarawa. The system as it is now just pays out any claims based on paper works but without the actual verification on how much really were shipped in from the outer islands.



There is a need now to increase the list of local produce eligible for freight refunds from the outer islands. Also the claim procedures need to be improved and made safe so all those involved in moving the local produce from the outer islands including farmers can have easy access to their refunds.

- i. Ministry of Finance is the leading agency for this pathway but to be supported by Agriculture, Fisheries, and chamber of Commerce (for their roles as transport operators and middlemen);
- ii. Review of the Special Levy Act and checking the produce and fisheries produce list and to see avenues to include more produce and fisheries products;
- iii. Work out the mechanism of paying transport refunds the farmers or transport operators in a timely and easy manner;
- iv. Improving the claim system to ensure the Fund is free from abuse especially by transport operators. As it is now, there is no monitoring on the actual quantity of produce offloaded in Tarawa and to certify the claim made on them. Whatever amount that appears on the official receipt is simply refunded and this is risky to the Fund;
- v. The MFED needs to see if it has a capacity and time to do this or otherwise this is outsourced to outside experts;
- vi. No committee needed here while the KFSTF can assign the Divisions in Finance, Agriculture, Fisheries and the KCCI to work on this within a short period of time;

(2) Food Import Reduction on Food Items that can be Locally Produced & Enforcement of Safe Food Imports:

During the National Food Dialogue, the local commercial vegetable, poultry & egg, piggery farmers, fishing operators, animal feed producers, and coconut virgin oil and toddy sugar operators expressed their desire to increase their productions and to compete with the important food products. The main problem however is in the lack of support from Government. All of these farmers, fishers, and producers use their own limited savings to start up their operations and in as much as they want to scale up - to increase production; finance is always their main setback.

- i. Min of Commerce to lead activities in this pathway but to be supported by Finance (for cost implications), Health (in the selection of unhealthy imported food items), Agriculture and Fisheries (local produce supply capacity);
- ii. Agriculture to determine the local produce that have potential to do away with exporting. Of course not rice, flour and sugar; but potentially green vegetables and tomatoes, drink sweeteners, tinned fish, eggs, pork, chicken, body oils, vegetable oils, and animal feeds;
- iii. Review of the relevant legislation in controlling entry and sales of unhealthy food imports?
- iv. Developing the technical and financial support to local vegetable farmers, poultry and piggery farmers, animal feed, VCO and toddy sugar producers with



an aim to increase their production - to counter the imported rivalry food products?

- v. Commerce to ensure that this exercise is to be carried out with proper consultations with farmers and producers and with the private sector. Taking their views will secure their cooperation and commitment in countering the imported rivalries.
- vi. One working committee is needed to be comprised of Commerce, Finance, Agriculture and Fisheries and to make regular and close consultations with the KCCI, and all commercial local farmers and producers;
- vii. The KFSTF is tasked to monitor and evaluate progress with great caution that Kiribati Food Security should never be affected in this pathway.

The Anticipated Kiribati Food Systems Task Force - Its Roles & Functions

The Kiribati Food Systems Task Force, hereinafter referred to as the Task Force, is the leading authority to coordinate all of the above pathways; A. Healthy Population - Our Shared Responsibility Pathway, B. Improved Access to Blue & Green Foods in the Country Pathway, and C. Affordable Healthy Foods Pathway. It is also the main role of this Task Force to ensure that all food systems actors play their roles as laid out in the pathways activities themselves.

As Cabinet has now approved the National Pathways; Kiribati has now the mandate to work on them with high hopes to transform its Food Systems in spite of the many setbacks such as poor soil, remoteness of islands from the capital and from international markets, and climate change. The low economies of scale in the outer islands will never be a problem if they are strategically connected with the Tarawa market. The destructive farming and fishing methods will be quickly replaced with smart techniques so the biodiversity of life forms in Kiribati will be restored and continue to offer their services to the Kiribati people today and in generations to come.

All food systems actors have expressed their commitment to work on their respective pathways and to stay united with all other actors so the entirety of the pathways will move forward together and to complement each other to bring about the needed transformation. Government's approval is the highest assurance that these pathways will be supported so they work to deliver the required results. There are nevertheless many areas in each of the pathways that Kiribati cannot work on alone and it requires collaboration and support of its bilateral partners and the United Nations.

The Task Force in its duty of measuring performance of the various actors working on the pathways will identify these areas of collaboration and coalition and would reach out to seek assistance from the international community.



The Task Force, though its formation is not yet approved, has identified its members and shaped their Terms of Reference and should be able now to drive forward Kiribati on these pathways - once approval is given by Cabinet. The Kiribati Government is also very determined, through this Task Force, to transform the Kiribati Food Systems, achieve the UN-Sustainable Goals by 2030, and realize the aspirations in the KV20. The expected lifespan of this Task Force will not be limited to 2030 or 2036 - the timelines for the UN-Sustainable Goals and the KV20 but would continue into the future as the Food Systems need to be continually monitored and supported especially as the population will continue to increase and climate change will continue to take its toll on Kiribati limited lands and reef ecosystem.

7 Conclusions

Kiribati is a small atoll nation with its unique way of life. With its weak economy and heavy dependency on imported foods; it still has the potential to change difficulties into benefits. This will only be true with the right level of support from its development partners, the United Nations and the International Community.

The fragility of its physical environment can be protected within the timeframes of the UN-Sustainable Goals 2030 and the KV 20 - 2036 when sustainable and safe extraction practices and technologies are adopted nationwide and have become new norms. The mindset of the people has to be set rightly so they see healthy and nutritious foods and environment caring as fashionable and acceptable.

In whatever small way Kiribati is doing in transforming its own Food Systems; it is hoped that Kiribati will also contribute in saving planet earth - our one and only home so it can continue to provide opportunities and benefits to generations to come.
