



Tanzania Stakeholders and End-Users Workshop: Synthesis Report

Dar es Salaam, Tanzania
11 August 2017



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UNIVERSITY | Friedman School of
Nutrition Science and Policy

Abbreviations and Acronyms

ASDP	Agricultural Sector Development Programme
CoDD	Cost of a Diverse Diet
COICOP	Classification of Individual Consumption According to Purpose
CoNA	Cost of Nutrient Adequacy
CoRD	Cost of a Recommended Diet
CotD	Cost of the Diet
CPI	Consumer Price Index
FAO	Food and Agriculture Organization of the United Nations
GoT	Government of Tanzania
IANDA	Indicators of Affordability of Nutritious Diets in Africa
IMMANA	Innovative Metrics and Methods for Agriculture and Nutrition Actions
MALF	Ministry of Agriculture, Livestock, and Fisheries
MDD-W	Minimum Dietary Diversity for Women of reproductive age
MITI	Ministry of Industry, Trade, and Investment
MoFA	Ministry of Food and Agriculture (Ghana)
MIS	Market information system
MUHAS	Muhimbili University of Health and Allied Sciences
NBS	National Bureau of Statistics
NCD	Non-communicable diseases
NEP	National Evaluation Platform
NPI	Nutritious food Price Index
PMO	Prime Minister's Office
SUN	Scaling Up Nutrition
TFNC	Tanzania Food and Nutrition Centre
UN	United Nations
UNICEF	United Nations Children's Fund
USDA	United States Department of Agriculture
WFP	World Food Programme

Introduction

On 11 August 2017 in Dar Es Salaam, Tanzania, the [Indicators of Affordability of Nutritious Diets in Africa \(IANDA\) Project](#) held a workshop to convene the Tanzanian agriculture, nutrition, and statistics communities and introduce a suite of new indicators on access to nutritious diets.

The workshop was attended by members of the National Bureau of Statistics (NBS), the Ministry of Industry, Trade, and Investment (MITI), the Prime Minister's Office (PMO), and the Food and Agriculture Organization of the United Nations (FAO UN), among others.

The objectives of the workshop were:

1. To introduce participants to the four indicators developed: Cost of a Diet Diversity (CoDD), Cost of Nutrient Adequacy (CoNA), the Cost of a Recommended Diet (CoRD), and the Nutritious food Price Index (NPI)
2. To discuss uptake and use of IANDA's suite of indicators in Tanzania at the national, regional, and local levels in stakeholder organizations
3. To discuss the future of food price data collection and use in Tanzania

The workshop began with opening remarks from Prof. Joyce Kinabo (IANDA, Sokoine University of Agriculture), Dr. Anna Herforth (IANDA), and Mr. Obey Assery (PMO), followed by introductions from IANDA and the NBS. The afternoon featured presentations on the IANDA suite of indicators, practice calculating two of the indicators, and a panel discussion on the future of food price data collection in Tanzania. The workshop was moderated by Dr. Fulgence Mishili (IANDA, Sokoine University of Agriculture).

The IANDA Project is based out of the [Tufts University Friedman School of Nutrition Science and Policy](#). The project is funded by the [Competitive Research Grants workstream](#) of [Innovative Metrics and Methods for Agriculture and Nutrition Actions \(IMMANA\)](#), a research programme funded by UK Aid. Collaborators on the project include faculty and researchers from the Sokoine University of Agriculture in Tanzania, the University of Ghana, and the Johns Hopkins Bloomberg School of Public Health.

I. Opening Remarks

The workshop commenced with remarks from Prof. Joyce Kinabo, Research Nutritionist for IANDA and Professor of Human Nutrition in the Department of Food Science and Technology at the Sokoine University of Agriculture. Prof. Kinabo welcomed the participants on behalf of IANDA and the Tufts University Friedman School of Nutrition Science and Policy and thanked them for their participation, specifically the Prime Minister's Office and Scaling Up Nutrition (SUN). Prof. Kinabo then recalled the objectives of IANDA to remind participants of the project scope: 1.) To use available market price data to develop indicators of affordability of diverse foods; 2.) To ensure the indicators serve the needs of policymakers, program managers, and researchers; and 3.) To recommend methods for improving food price data monitoring in Tanzania and Ghana. Building on the inception workshop held 28 June 2016 in Dar es Salaam, Tanzania, Prof. Kinabo set out the day's mission of discussing and defining next steps for research uptake and use.

[Dr. Anna Herforth](#), Project Director for IANDA, followed with her remarks, invoking the participants to use food price data for food security and nutrition – to monitor where and when people do not have the ability to access nutritious food. Dr. Herforth thanked all of the partners who have made the IANDA Project's endeavors in Tanzania possible and provided an overview of progress in the last year.

Finally, Mr. Obey Assery, Director of Coordination of Government Business for the Prime Minister's Office and a SUN focal point, gave his remarks and thanked the IANDA team for holding the workshop and inviting diverse stakeholders from all sectors to inform national agriculture and nutrition policies. From his perspective, the critical issues of over- and undernutrition in Tanzania reflect poor diets, and IANDA's indicators will help decision-makers identify where and when nutritious foods are unavailable across Tanzania's diverse ecological zones. Mr. Assery lauded IANDA for using existing data to generate new information on food and nutrition security in Tanzania, which can be operationalized into nutrition-sensitive agricultural interventions, per the SUN framework. He said that these new indicators developed by the IANDA Project will help us to make decisions and formulate policy. Finally, Mr. Assery requested that the stakeholders participating in the workshop ask the difficult questions to move the discussion forward.

II. Introduction to IANDA, Dr. Anna Herforth

The vision of IANDA is that when we talk about food prices, we should have measures that reflect the food people need for active and healthy lives. The [FAO defined food security in 1996](#) as “All people, at all times, [having] physical and economic access to sufficient, safe, nutritious food to meet dietary needs and food preferences for an active and healthy life.” Beyond staples, work needs to be done to measure diverse, nutritious foods – work to which IANDA has contributed.

Research shows that diet is the top risk factor within the global burden of disease, and while undernutrition in Africa is still a burden, dietary risks to non-communicable disease (NCD) are also a problem. The [top dietary risks in Sub-Saharan Africa](#) are low consumption of fruits, high consumption of sodium, low consumption of vegetables, low consumption of whole grains, low consumption of nuts and seeds, and low consumption of omega-3 fatty acids (in order of decreasing negative impact). These risks have not classically been the highest priorities for intervention, and decision-makers need metrics to define these issues, monitor food systems, and develop interventions.

Currently, food prices generally reflect starchy staples, or a basket of foods comprised of most economically important commodities. These commodities do not mean the price of foods that human beings need to have adequate nutrition or thrive. Last year, IANDA held its inception workshop to convene stakeholders and landscape food price data collection in Tanzania. Through consultations with key organizations, the IANDA team identified natural partners for project work: the National Bureau of Statistics and the Ministry of Industry, Trade, and Investment. Other organizations that also collect food price data include the East African Grain Council, the Kariakoo Market Corporation, and Esoko. However, the non-government organizations had limitations in their data for IANDA’s purposes, including missing food groups important for dietary diversity, small geographic range, and/or proprietary ownership.

In addition to working with researchers and faculty from the Sokoine University of Agriculture, IANDA partnered with the National Evaluation Platform (NEP), a collaboration between the Johns Hopkins Bloomberg School of Public Health and national stakeholders in Tanzania. This platform is primarily responsible for compiling all relevant data for monitoring population health, but lacks nutrition and nutrition-sensitive statistics and indicators. By including IANDA’s suite of indicators, the NEP can lead the way and act as a model for all SUN countries – enabling decision-makers to create more nutritious food systems.

The purpose of using food price data and using IANDA’s suite of indicators is to provide more timely nutrition-sensitive information for policy purposes. Because Tanzania has so many stakeholders engaged in agriculture, policymakers can truly use the information generated to address access to nutritious foods through targeted interventions.

III. Stakeholder Organizations in Tanzania

During this session, the National Bureau of Statistics presented on their organization's mandate and scope, current and prospective work with IANDA, and present efforts to track food prices in Tanzania.

Mr. Hashim Njowele, Statistician at the National Bureau of Statistics

Mr. Hashim Njowele started his presentation on the NBS by providing a brief overview of the organization's history. The NBS was officially founded in 1999, but existed before as the Department of Statistics. In 2002, the NBS was given the sole mandate of producing official statistics to aid development planning in Tanzania. With regards to IANDA's work, one of the key activities of the NBS is to collect price observations to calculate the national consumer price index (CPI). Additionally, the NBS collects demographic, labour, and consumption statistics.

To produce the CPI, the NBS collects and keeps a database of prices for 278 goods and services, of which 97 are food. These data are collected from markets or outlets where people shop in 26 regions on the Tanzania mainland. These markets and outlets include open markets, shops, supermarkets, department stores, and hotels. While there is currently an urban bias in the data collected, initiatives are underway to start collecting data in rural areas. In the near future, the NBS plans to complete a household budget survey that will include home production, in addition to expenditures. They also plan to expand to rural markets, which will hopefully lead to district and regional representativeness, in addition to national.

Currently the NBS collects food price data monthly, with data collection carried out during the first two weeks. Special considerations are given to fresh food items, such as fruits and vegetables and fish: price data collection is scheduled during morning hours. This ensures the price data is not distorted by deteriorating quality of produce.

Questions

Q:	When collecting price data, how does the NBS control for extreme values?
A:	The NBS uses geometric means as it is a method less sensitive to extreme values.
Q:	Using NBS price data, how does food compare to other sources for inflation?
A:	Food price inflation contributed much more 10 to 15 years ago than it does now.
Q:	How can stakeholders contribute to the planning and development of future household budget surveys?
A:	The NBS holds open meetings that stakeholders are welcome to attend.
Q:	How can NBS include prices on a greater diversity of foods (like fruits and vegetables)?
A:	The food basket is constructed based on what we learn that people buy from the household budget surveys. When an item represents a significant percent of consumption,

	it is then included in the basket. Expenditures on items representing a smaller proportion of consumption are not discarded, but put together with other items.
Q.	How do you factor in climate change to food prices?
A.	We just collect observable prices. We do not explore the reasons for changes in food prices.

Discussant: Mr. Charles Genya, Ministry of Industry, Trade, and Investment (MITI)

Mr. Charles Genya provided discussion to the points made by NBS, as MITI also has a mandate to collect food price data on agricultural commodities. MITI collects data from 116 districts (there are 169 districts in Tanzania) at open markets used by the majority of people and district centers, which are under local government authority. They do not collect price data on processed products, so limited to agricultural crops. MITI collects wholesale prices three times a week (on Mondays, Wednesdays, and Fridays) in 26 regional markets, which includes prices for “main food crops”, meaning almost all cereals. They collect retail prices at the beginning and middle of each month for 74 crops from the 116 district markets.¹ The food categories on which MITI collects data includes cereals, pulses, roots and tubers, vegetables (onion, tomato, cauliflower, and cabbage, but not dark green leafy vegetables or okra), fruits (most common), oilseeds, livestock products (beef, chicken, pork, goat, mutton), spices, and sugar. Sugar prices are collected by the Sugar Board, but the GoT needs its own data directly.

There are several barriers generating a complete dataset with all of the commodities described above. The first barrier is that decentralization by devolution means that the enumerators are employees of the local government organizations. Therefore, MITI does not have the authority prescribe certain policies and procedures, but rather communicates goals with the local authorities. As a result, the number of districts reporting information to the national government is only 30 or 40, instead of all 116. The enumerators are not MITI employees and MITI does not adequately compensate them for their work. Sometimes the enumerators do not even have travel fare to get to markets. Furthermore, MITI has no specific market information system (MIS) unit. Therefore, price data collection is easily left out of budget planning and spending and instead allocated to other activities. MITI is using technology to collect price data, currently using a digital application instead of traditional pen and paper-based methods, but still has to follow-up closely with local enumerators to send their data. Thus, MITI has major gaps in data, especially in non-staples. Anyone can access MITI’s data by request, but users must know how to work with the data gaps.

Questions

Q:	How do we deal with this major gap in Tanzania food price data: How do we get district-level food price data?
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¹ Price data is twice monthly because consumption patterns change as people have more or less money on hand to purchase commodities.

IV. Indicators of Affordability of Nutritious Diets

During this session, Dr. Anna Herforth described the four indicators developed by the IANDA Project and showed preliminary results using Tanzania and Ghana food price data. For a summary table of indicators, please refer to Annex C.

Dr. Anna Herforth, Director of the IANDA Project

The indicators developed through the IANDA Project fall into two categories: (1) indicators of the absolute cost of purchasing a nutritious diet, which include (a) Cost of a Nutrient Adequacy (CoNA) and (b) Cost of a Recommended Diet (CoRD); and (2) indexes of price change, which includes the Nutritious food Price Index (NPI) and the Cost of Diet Diversity (CoDD).

The **Cost of Nutrient Adequacy** shows the minimum cost of achieving minimum nutrient adequacy, with no other dietary constraints. The indicator can also serve other purposes, such as showing which foods contribute most to helping an individual reach nutrient requirements; and which nutrients are the most costly. From IANDA's experience working in Ghana, it is important to have sufficient coverage of diverse, nutrient-rich foods, as these are the items that will contribute the most to meeting a nutrient adequate diet. Analyses using data on an insufficiently diverse set of foods can yield unrealistic results. The indicator is also able to identify trends and patterns across regions.

Food composition for the Tanzania data used values from the [2012 West African Food Composition](#), developed by the FAO UN. Where data was missing, we used the [2016 United States Department of Agriculture \(USDA\) Food Composition Database](#). The nutrient requirements are for an adult woman to mirror the Cost of a Diverse Diet indicator.

The **Cost of a Recommended Diet** shows the total cost of meeting given food-based dietary guidelines. This is the most intuitive way to understand economic access to adequate food, and show which food groups are the most expensive. Because Tanzania does not yet have food-based dietary guidelines (though in development at the time of this workshop), we substituted the [African Heritage Diet guidelines](#) with the portion sizes of [Benin's food-based dietary guidelines](#) for demonstration.

The **Nutritious food Price Index (NPI)** follows the principles behind constructing a usual food consumer price index (CPI), but uses weights for food items based on nutritional value instead of weighting food items by expenditure share. The nutritional value weights are based on [NuVal scores](#), which score the overall nutritional quality of a food on a scale of one to 100, informed by the [US Dietary Guidelines for Americans](#). To construct each food score, the scoring system factors more than 30 different variables (nutrients and nutrition factors) and up-weights and down-weights them based on how favorable or unfavorable they are for health. While the exact algorithms used to calculate the weights are not public, there is published work that describes NuVal's implementation in the US and its applications, such as [behavior change](#) and [indicator development](#).

Finally, the **Cost of a Diverse Diet** is an index that builds off the methodology used to create the [Minimum Dietary Diversity for Women \(MDD-W\)](#), a dichotomous indicator of whether or not women aged 15-49 years have consumed at least five out of 10 food groups the previous 24 hours. The cut off of five food groups was [validated for micronutrient adequacy](#) assessed by multiple 24-hour recalls. For each of these food groups, the CoDD shows the minimum cost food item and tracks how much it costs to add the fifth food group.

Questions

Q:	How do these price indexes compare to the cost of just filling up the belly? That would be interesting to see.
A:	<p>These indicators calculate the cost of nutritious diets, which is surely more expensive than just achieving adequate calories. It would be interesting to do a calculation of adequate calories just to see how it does compare.</p> <p>[A representative from World Food Programme noted that the Cost of the Diet (CotD) approach developed by Save the Children and WFP does exactly that: first calculates the cost of meeting calorie needs, and then in a second step calculates the cost of meeting nutrient needs based on typical dietary patterns. The CotD methodology is somewhat different from IANDA's and could be a complement.]</p>
Q:	IANDA methods so far calculate the cost of nutritious diets for individuals; you could calculate the cost for multiple household members, for a key target group, or for the whole household.
A:	Yes we can; this idea was also proposed during the workshop held in Ghana.
Q:	How does the Ghana situation compare in terms of accessing district-level data?
A:	<p>Ghana has (1) regionally-representative CPI data collected by Ghana Statistical Service because they collect from representative rural as well as urban markets, and (2) district-representative Market Information System data collected by the Ghana Ministry of Food and Agriculture (MoFA). Some MoFA district data is missing due to lack of enumerators and staff turnover, but overall the information is mostly intact and the system works well. Ghana has a centralized system unlike Tanzania, so this issue of local-level authority and non-response to national institutions is not at play.</p>

V. The Future of Food Price Data Collection and Use in Tanzania

This session featured a panel of key stakeholders for food price data collection in Tanzania, who represent different sectors and organizations and featured discussion on a variety of issues ranging from research practices, real world applications of IANDA’s indicators, and sustainability of food price monitoring in Tanzania. The session was moderated by Prof. Joyce Kinabo and Dr. Fulgence Mishili.

<i>Panelist</i>	<i>Role and Organization</i>
Dr. Joyceline Kaganda	Director of the Tanzania Food and Nutrition Centre
Mr. Hashim Njowele	Statistician at the National Bureau of Statistics
Mr. Obey Assery	Director of Coordination of Government Business for the Prime Minister’s Office, SUN Focal Point
Mr. Genya Charles Genya	Director of the Ministry of Industry, Trade, and Innovation
Ms. Elyse Batistella	Nutrition M&E and Analysis, World Food Programme

The need for clarity and information on nutrition-sensitive agriculture

The panelists remarked that nutrition-sensitive data and targets are needed – a gap the IANDA indicators help fulfill. TFNC noted that when they advocate for nutritious food to the Ministry of Finance and Planning, stakeholders still have questions about the products due to lack of information. More production data on fruits and vegetables would be helpful, as would indicators on cost such as the IANDA indicators. Mr. Assery noted that “when we advocate for nutrition-sensitive agriculture, we can [use IANDA’s suite of indicators] to say ‘this is what we want you to promote.’” He also remarked that this would set an example of how to think about other nutrition-sensitive areas as well, such as water, sanitation, and hygiene (WASH), not only in Tanzania but globally. The question it helps to address is, “What is nutrition-sensitive, and how do we measure it?” He cautioned that for us to be able to apply the indicators well, reliable data are essential.

During the discussion, the panelists and participants brainstormed **potential uses of IANDA indicators**:

- **Development and monitoring of nutrition security, and early warning systems:** Panelists suggested adding nutrition security to MALF’s routine monitoring of food availability. MALF representatives stated that giving information on food security is their goal; While they are actualizing this goal, they are missing nutrition sensitivity because they are not tracking appropriate indicators. The IANDA indicators fill this gap.
- The panelists and participants also discussed how nutrition-sensitive data and indicators could improve planning for programs targeting broader levels, such as **social protection**. For example, the food price data could be used to improve development of **school feeding programmes** by helping inform planners to choose low-cost nutrient-dense foods.

- Panelists from NEP and WFP described how including cost of diet indicators in their **social and behavior change communication programs** could improve messaging by tying nutrition to what households can afford using recent price data.
- A professor, medical doctor, and chair of the Tanzania NCD Alliance remarked that he could use the information and indicators to counsel patients suffering from diseases associated with overweight and obesity and help them to understand and access cheap and healthy diets to address their challenges.
- Professors noted that they can **teach nutrition students how to access this information**, in order to be better prepared to addressing these issues. They asked how they could incorporate the indicators into their curricula.
- The data and indicators could also be used to **inform producers of potentially lucrative business opportunities**, who could fill important market gaps for nutrition.

These uses could lead to improved advocacy and planning at the policy level. Some participants noted that coming to this workshop has made the message even clearer that if we want to address food insecurity in addition to malnutrition, we have to take nutrition into account.

The panelists discussed action steps for each organization, starting with data generation and quality improvement:

- MITI outlined the need to update their food list to generate more diverse price data, and call the enumerators together to inform next steps toward changing their tools. This could be done in the context of annual training and by updating the software used to manage data collection.
- MITI price data is currently not published and is mostly used internally by the ministry in solving various issues, such as the issue of sugar prices. Panelists agreed these indicators will help convert the data into something very useful to guide decisions about food security.
- Panelists discussed the need for better collaborations between institutions working with price data – to come together and ensure the needed data are collected, such as district-level prices. Representatives from UNICEF suggested to link nutrition officers at district level to NBS: the nutrition officers could potentially provide data at the district level so long as it does not overburden them.
- Furthermore, there is a need to ensure that the data are available in a timely manner for public use. Panelists discussed the need to ensure information is available to the districts. There was a suggestion to explore if the data could be collected, analyzed, and used by the council at subnational levels.

- Many organizations, such as the NEP and UNICEF, encouraged the NBS and MITI to use the upcoming HBS to make the data representative of rural regions and at the regional level.
- NBS stated that there are plans now to collect price data in districts, and that they also will have regionally representative weights from the upcoming HBS results. There are also ongoing studies of differences in prices between rural and urban areas. So district and regionally representative prices are possibilities after the next HBS.

Ways forward:

- Mr. Obey Assery of the PMO noted that as of 2015, by law, NBS has the mandate to coordinate all the statistics for Tanzania. To sustain efforts, panelists and participants alike agreed that collection of these data belongs to the NBS, and that its scope should respond to the articulated demand for more nutrition sensitivity. Mr. Assery implored: “With nutrition being a national issue, we really need this data.” Also speaking on the role of the NBS, Dr. Fulgence Mishili noted, “If the GoT has entrusted NBS to be the authentic source of data for everyone, then if we have limitations, we need to expand it.” Prof. Joyce Kinabo summarized, “We need these indicators routinely, not just in surveys. For instance, NBS has the CPI on a monthly basis; is it possible for you to do the NPI monthly as well? It is just a matter of calculations. In that way we can have this information calculated on a regular basis.”
- NBS expressed interest in calculating the NPI, because it is very similar to what is already done to calculate the food CPI, so it could be easily adopted. To do this, the NBS requested support and input from nutritionists. The IANDA team confirmed that they will gladly assist and collaborate with NBS to enable monitoring of the new indicators.
- WFP expressed special interest in the CoRD indicator because the calculations are so simple; there is capacity for the indicator to be picked up and used at lower levels of government. (The CoNA indicator or WFP’s Cost of the Diet approach would need to be centralized at some level because it requires linear programming and training.) The limitation with CoRD is that Tanzania does not currently have food-based dietary guidelines, but, as Elyse Batistella remarked, “[This] shouldn’t stop us from moving forward. We do not want the momentum to be lost just because we are waiting for better recommendations and better data.” The representatives from the MUHAS agreed, and would be interested in incorporating the CoRD indicator into the curricula. Another participant noted that CoRD is more comprehensive as it includes diet diversity and nutrient adequacy inherently.
- WFP also suggested that these indicators would enhance standard food price monitoring in MALF: “Where we see very good monitoring of individual commodities but that does not take into account a full diet. We would love to see MALF reporting on commodity

prices *and* trends over time in the cost of a nutritious diet; and using [those data] to understand if nutrition-sensitive agriculture approaches are producing needed results.” Further, WFP extended an invitation at the meeting to IANDA to share results of the food price analyses conducted in Tanzania.

- MALF expressed interest in incorporating the indicators in their current monitoring, proposing to first sensitize its end-users and uptake and use of the indicators during an upcoming agricultural policy conference planned to take place during early 2018. In particular, the MALF would like to add CoDD to the food security indicators they already compute because “we are advocating for diet diversity metrics in the Ministry... We can start with CoDD to see if what we are doing affects it.”
- MITI noted that progress depends on the availability of Tanzania Agricultural Sector Development Programme (ASDP) funds. In ASDP 2, one of the activities is how to strengthen food price data collection. MITI could put in a proposal to take into consideration nutritional data, and will connect with NBS and IANDA to make sure to capture the right food items.
- Mr. Assery proposed two steps for this to be consumed and integrated into our plan at high level. (1) Proposed that Dr. Kaganda (TFNC) bring it into the technical working group, and that (2) Prof. Kinabo include it into high level steering group agenda or sub-agenda on nutrition. Further, Mr. Assery requested the IANDA Sokoine University of Agriculture team to make a presentation at the upcoming 4th Annual Joint Multi-sectoral Nutrition Review meeting in early September 2017.
- To enhance the usability of the other indicators, the IANDA team will incorporate feedback received during end user consultations, such as this workshop and others. For the CoNA indicator, IANDA will ensure that proper guidance is provided for modifying the nutrient requirements for target groups, such as young children and people living with HIV/AIDS. For the CoRD, IANDA will stay apprised of the development of Tanzania’s food-based dietary guidelines and ultimately use them for its calculations.

Finally, the discussion turned to uptake and sustainability. The participants all agreed that the high-level stakeholders, namely from the PMO, the TFNC, and the Sokoine University of Agriculture, can and will make efforts to communicate results from the workshop to nutrition technical working groups, steering committees, and sub-agendas on nutrition. These efforts could spur closer and more effective collaboration between agriculture and nutrition organizations in Tanzania for food security. Mr. Obey Assery closed the discussion with a suggestion to present on IANDA and its outputs at the next SUN Global Gathering in November 2017 in Abidjan, Côte d’Ivoire. “Nutrition-sensitive agriculture is still troubling a lot of us; not only in Tanzania. Let us plan to present this in SUN global gathering just to share the knowledge. To encourage other countries and raise the debate for other sectors.”

VI. Summary of Workshop

Dr. Joyceline Kaganda of TFNC closed the workshop by thanking the speakers, panelists, and participants for attending and contributing to the IANDA Project, and by summarizing key issues and action steps. “We have a way forward; but we still have gaps. We want the data to tell us more about diets. We also have gaps in subnational data. We also have the gap of bringing this into the awareness of many stakeholders. There are forums where we can take this immediately – informing people so that they can buy in. If many people know about it, it will be easier to put into action.” She stated that the Tanzania Food and Nutrition Centre is one such organization that can use these indicators and provide a model for others.

- IANDA’s suite of indicators fill a critical gap in Tanzania’s current monitoring of food and nutrition security.
- Food price data can tell us more about diets and how these look at the national- and subnational-levels. These indicators could be used to enhance monitoring of and advocacy for improved food and nutrition security. This could span district-, regional-, national- and internal level programming and policymaking.
- There are several upcoming fora at which stakeholders can advocate for the use of IANDA’s suite of indicators – it is important to quickly inform and sensitize decision-makers to continue momentum.

VII. Annex A: Participant List

	<i>Name</i>	<i>Organization</i>
1	Obey Assery	PMO
2	Tricia Aung	NEP
3	Elyse Battistella	WFP
4	Genya Charles	MITI
5	Tumaini Charlie	ASPIRES/Michigan State University
6	Geoffrey Chiduo	TFNC
7	Sauli Epimack	TFNC
8	Deborah Esau	PANITA
9	Zachary Gersten	IANDA
10	Irene Godlove	MUHAS (student)
11	Moureen Guveti	MITI
12	Anna Herforth	IANDA
13	Claire Ijumba	ASPIRES/Michigan State University
14	Dafrosa Jerome	MALF
15	Joyceline Kaganda	TFNC
16	Tatu Kayumbu	MALF
17	Anna Kilala	DFID
18	Joyce Kinabo	Sokoine University of Agriculture, IANDA
19	Aichi Kitalyi	FACT Consulting
20	Tumaini Mikindo	PANITA
21	Fulgence Mishili	Sokoine University of Agriculture, IANDA
22	Fadhili Mtengela	FAO UN
23	Margaret Natai	MALF
24	Joyce Ngegba	UNICEF
25	Debora Niyeha	NEP
26	Hashim Njowe	NBS
27	Luitfrid Nnally	TFNC
28	Beatrice Ntoga	Ministry of Agriculture, Livestock, and Fisheries

29	Augustine Olal	PMO
30	Hellen Sadiki	MUHAS (student)
31	Naomi Saronga	MUHAS
32	Esther Solomon	President's Office, Planning Commission
33	Andrew Swai	Tanzania NCD Alliance
34	Mwita Waibe	PORALG

VIII. Agenda

<i>Time</i>	<i>Session</i>
8:30	Registration and morning tea and coffee
9:00	Welcome from Prof. Joyce Kinabo and Dr. Fulgence Mishili (IANDA, Sokoine University of Agriculture)
9:05	Opening remarks from Mr. Obey Assery (PMO, SUN Focal Point)
9:30	Introduction to IANDA: Motivation, data, and collaborations from Dr. Anna Herforth (IANDA)
10:00	Data from the National Bureau of Statistics: Current methods and Updates from Mr. Hashim Njowele
10:30	Coffee break
10:45	New indicators of affordability of nutritious diets and discussion, led by Dr. Anna Herforth (IANDA)
11:45	Individual hands-on practice for calculating the indicators
12:00	Buffet lunch
1:00	Debrief of indicator calculation
1:15	Discussions on indicator uptake and use , introduced by Ms. Debora Niyeha of the National Evaluation Platform (NEP)
2:30	Coffee break
2:45	Panel on the Future of Food Price data collection and use in Tanzania , facilitated by Prof. Joyce Kinabo with members of the NBS, TFNC, MITI, NEP and MALF
3:45	Closing remarks facilitated by Dr. Fulgence Mishili

IX. Summary of IANDA Indicators

<i>Indicator</i>	<i>Data required and nutritional standard met</i>	<i>Main knowledge outputs</i>
<i>Cost of Nutrient Adequacy (CoNA)</i>	<ul style="list-style-type: none"> • Nutrient content of each food • Nutrient requirements for the population of interest 	<ul style="list-style-type: none"> • Cost/day of achieving nutrient adequacy • Quantity/day of each food and of each nutrient in the lowest-cost adequate diet • Cost/unit of each limiting nutrient, to show the most costly nutrients
<i>Cost of Recommended Diet (CoRD)</i>	<ul style="list-style-type: none"> • Dietary recommendations (e.g. national food-based dietary guidelines) • Quantity of each food category recommended (e.g. 400g of fruits & vegetables per day) 	<ul style="list-style-type: none"> • Cost/day of meeting dietary recommendations (such as national food-based dietary guidelines) • Quantity/day and cost/unit of each food in the recommended diet
<i>Cost of Diet Diversity (CoDD)</i>	<ul style="list-style-type: none"> • Threshold number of food groups needed (e.g. Five of 10 groups for MDD-W) 	<ul style="list-style-type: none"> • Unit-free index (100 in base case) that shows change in cost of reaching minimum diet diversity • Identifies lowest-cost food in each group • Identifies lowest-cost groups to reach minimum diet diversity
<i>Nutritious-food Price Index (NPI)</i>	<ul style="list-style-type: none"> • Rating of each food by its nutritional value (e.g. NuVal scores from one to 100) 	<ul style="list-style-type: none"> • Unit-free index (100 in base case) that shows the cost of foods weighted by their nutritional value • Identifies change in cost of more rather than less nutritious foods, for comparison with conventional food Consumer Price Index (CPI)
<i>Optifood and Cost-of-Diet</i>	<ul style="list-style-type: none"> • Same as CoNA, plus • Cultural or culinary constraints (e.g. staples to include, taboo foods to avoid, or recipes to match observed dietary intake) • Food expenditure constraints • (e.g. maximum \$1.2/day) 	<p>Same as CoNA, plus</p> <ul style="list-style-type: none"> • Problem nutrients for which requirements cannot be met given expenditure or other constraints