

## **AGRIDIET Inception Workshop Report**

**Addis Ababa University  
College of Business and Economics, Eshetu Chole Conference Hall**

**Day 1 – 21 November, 2012**

Dr Nick Chisholm, Principal Investigator, welcomed the AGRIDIET team members and distinguished guests to the Inception Workshop of the project.

The Inception Workshop was addressed by Aidan O’Hara, Irish Ambassador for Ethiopia, who referred to the recent 1,000 days initiative which the Irish government is taking a leading role in and how the AgriDiet project could help to fill some of the knowledge gaps surrounding the links between agriculture and nutrition in Ethiopia and Tanzania, two of Irish Aid’s nine programme countries.

Getachew Yoseph, Director of Program, Ethiopian Development Research Institute (EDRI) also addressed the meeting noting that EDRI would be supporting the project by bringing expert local knowledge to the international team, as well as strong empirical knowledge in investigating the links between agriculture and nutrition.

### **1. AGRIDIET Overview**

University College Cork (UCC) provided an overview of the AGRIDIET project, noting that the project had been proposed more than a year ago and signed up to at that time by all the partners. Irish Aid then postponed the call for a number of months and subsequently required a five per cent reduction in the budget. A revised proposal was accepted in April 2012 and meetings with Irish Aid were then held in June in order to provide more detailed implementation plans and October, after which Irish Aid disbursed the first half year of funding to UCC within the total programme budget of some 930,000 euro over three years.

The Irish Aid call has three major thematic areas – Hunger, Education and Health. Seven projects in total have been supported under this Call: AGRIDIET is the largest project supported under the Hunger theme.

The Irish Aid call runs from 2012-2015 under a transitional phase with the possibility of further support for extended projects post-2015, with an emphasis on those projects developing strong partnerships between North and South organisations.

AGRIDIET is one project involving two countries, Ethiopia and Tanzania. There are two Irish partners – UCC working mainly on the Ethiopian part and UCD working mainly on the Tanzanian half. UCC is also managing the entire project. There are three Ethiopian partners, the Ethiopian Research Development Institute (IDS), Haramaya University, Mekelle University, and two partners in Tanzania, Sokoine University and St Augustine’s University. The Institute of Development Studies in the UK is then cross-cutting over most of the project with its extensive global experience.

In each country there are three PhDs, one in nutrition, one agricultural economist and one in agricultural systems. The PhD students will be registered in UCC and UCD but working in-country and supported by in-country academics.

### 1.1 Aims of AgriDiet

- 1) To identify how agriculture impacts on the nutritional status of members of rural households in areas of high nutritional vulnerability in Ethiopia and Tanzania
- 2) To identify policies and interventions that can make a positive impact on nutritional status.

### 1.2 Specific Objectives

- 1) To understand how agricultural and broader socio-economic policies address nutritional goals in Ethiopia and Tanzania, especially for young women and children
- 2) To identify the socio-economic and environmental factors influencing local agricultural practices and the implications for household-level nutrition
- 3) To map the range of nutrition-oriented interventions in the agriculture sector and to identify what’s working and what’s not working.
- 4) To develop and promote evidence-based recommendations for improving nutrition through influencing agricultural systems.
- 5) To work with and build the capacity of partners to mobilise knowledge and increase evidence-informed policymaking and to promote scaling up.

### 1.3 Timescale

The timescale of the project is from October 2012 to September 2015. It was noted that it was unlikely the six PhDs would complete all their academic work by that date.

### 1.4 Outputs

1. One global state of the art analysis of current theory and policy on agriculture-nutrition linkages.
2. Two in-depth critical and gendered analyses of agricultural and related socio-economic policies and their links to nutrition; one for Ethiopia and one for Tanzania
3. A systematic review of recent pro-nutrition interventions in the agricultural sector in Ethiopia and Tanzania And the evidence for improved nutrition

4. Four multi-dimensional local studies, two in Ethiopia and two in Tanzania, of agricultural practices, markets and support systems and their impact on nutrition
5. Information materials and strategies for improving the integration of agriculture and nutrition
6. An international conference on agriculture-nutrition linkages
7. A web-portal on agriculture-nutrition linkages, bringing together all aspects of the research, policy recommendations and other resources.
8. Six PhD theses
9. Published outputs

### 1.5 Work Packages

1. International Review
2. County studies of national policies
3. Concept framework and methodology
4. Meso-level research on agri-food value chains
5. In-depth household studies of agricultural production, food consumption patterns and dietary practices
6. Pro-nutrition agricultural interventions in Ethiopia and Tanzania
7. Stakeholder platforms with key role-players
8. Knowledge mobilisation strategies responding to local needs
9. Project management

### 1.6 Partners Inputs and Responsibilities

The work packages are broken down into specific activities to be undertaken by partner institutions, with leaders for each work package. Budgets are allocated to partners on a six-monthly basis in line with the specific activities delivered. Partners are responsible for reporting progress and financial details each six months under the research collaboration agreements.

### 1.7 Governance Management

The Steering Committee, comprising one member per partner, has overall responsibility for setting and monitoring the overall direction of the project and for ensuring delivery of outputs, and will meet bi-annually.

The Operational Management Group, comprising the UCC PI and project manager, University College Dublin (UCD PI), ERDI PI and Sokoine PI, has responsibility for the operational management of the project, ensuring that all activities are implemented on schedule and resources made available on a timely basis.

### 1.8 AgriDiet Implementation

The project has now evolved from a proposal to a working project. A collective effort is now needed to create ownership and to start making the inputs.

In reality there are not 6 PhDs but one project, so we need a common methodology, which has both theoretical and applied application.

It was noted that we need to engage with civil society organisations to inform research as well as dissemination and this can be initiated with the help of local partners. It was also noted that the budget would be a constraining factor for activities and that we needed to be realistic about what could be achieved within the budget with clear expectations.

## **2. Address by Steffen Schulz – CIP (International Potato Centre)**

Steffen Schulz provided a short summary of the CIP work in Ethiopia. CIP has its HQ in Peru and works in 10 countries. The Ethiopia office has 16 staff and is focusing on the establishment of sustainable seed systems, working with Hawassa, Haramaya, and Mekelle universities. The importance of good quality seed was illustrated by the fact that yields are generally double those using farm-saved seed. CIP are also involved in the promotion of nutrition, with the project in Tigray funded by Irish Aid, providing cooking demonstrations with recipe ideas and advertising.

CIP works with both the Bureau of Agriculture and Bureau of Health, the former of which provides improved seeds and the latter promoting the benefits of consuming Vitamin A-rich sweet potato, for example.

Key bottlenecks are the institutional silos of the bureaus, with little linkages between the government departments. On the technical side, the preservation of vines over dry season is an important barrier, as it has to be kept over the dry season. There is also a sister project in the Southern Nations, Nationalities and People's Region (SNNPR) starting in Hawassa.

CIP noted that Ethiopia has a wealth of baseline studies with vast databases - eg USAID livelihood studies baselines, CIMMYT nutritional survey, IFPRI data, etc

## **3. Discussion on the overall research methodological approach for the project**

Jessica Meeker from IDS introduced some slides from Lawrence Haddad, who joined the discussion later by skype.

### Key Issues and Questions for the Project

Key Research Questions:

1. Leadership – *Who is responsible and motivated to improve nutrition through agriculture in each country and how can we involve them?*
2. Gender – *who has the power in deciding on input purchases, what to grow, what to sell, and how does that affect nutrition?*
3. Specificity – *what do we want the agriculture community to do differently and how realistic is this?*

*Methodological Issues:*

4. Nutrition indicators – *growth and stunting (but mitigation of stunting is only possible through nutrition intervention rather than agriculture interventions), dietary diversity is a preferred indicator and assess the nutrition knowledge too*

5. Knowledge of Nutrition: *Assess nutrition knowledge of different actors and decision-makers (possible explanatory variable)*
6. Combine qualitative and quantitative – qualitative to understand why an agricultural intervention is not working
7. Link up data at different levels- strategy as well as specifics – *which areas to invest in – crops etc.*
8. Exact mechanisms matter – *micro details.*
9. Research teams – *reflect both agriculture and nutrition disciplines and respect each other's disciplines and openness on what each can bring - remember overall goal – ie identify which agriculture interventions best maximize nutritional impact and why.*

### ***Lawrence Haddad joined by Skype***

Lawrence Haddad made the point that the target audience of the AgriDiet project should be those people involved in agriculture who want to do something about nutrition, as others will view nutrition as one more thing to add to their list and others may not even have thought about it.

The evidence for using household dietary diversity measures is very good in terms of household nutrition and newborns getting a good start in life. There seems to be strong evidence for a link between diet diversity and reduced stunting – if the project has resources, it should measure both. However, it was noted that further detail would be required for intra-household nutrition and the detail on micronutrients may not be so evident from dietary diversity. We should measure household-level diet diversity and child diet diversity: the first 1,000 days are important, but are not the only window.

Utilisation also matters – influenced by health condition. The health context matters but agriculture can't really affect that. But info on the sanitation environment should be collected.

Diet diversity measures micro-nutrient consumption but not absorption –some food combinations affect micro-nutrient absorption (may need to collect data through blood samples – but this is expensive).

Lawrence also made reference to the cash crop studies of the 1980s and 1990s by IFPRI re. the improved nutrition from increased sales of cash crops and to learn from the mistakes that were made at the time. For example, whilst it may not matter what a farmer grows if they can sell the produce for income to ensure adequate nutrition, this is only the case where markets work; where markets are not working there is more importance for nutritional outcomes in what you grow. One question to address is how well are food markets working? The importance of a whole diet approach was also stressed given that many studies had focussed on interventions of particular food types, but it was then not clear what the overall dietary impact would be given changes in consumption of other foods (see e.g. the Systematic Review on Ag-Interventions). For example, if meat consumption were to increase due to an agricultural intervention, consumption of other foods may have fallen, so what was the overall outcome?

What is the political commitment of policy-makers to improve nutrition through agriculture? There might be scope to do some market analysis on key nutrition decision-makers, regarding their attitudes over the 3 years of the project.

Lawrence summed up three things that WP1 might do;

- i. a review of reviews
- ii. guidance and recommendations distilled from the reviews on what to do.... perhaps three things we can do based on the evidence
- iii. a global level market survey of key nutrition experts and decision-makers from the major organisations involved.

It was also stressed that only the research showing credible causality should be used, and that the volume of data collection should not be the priority but more the quality, in order to keep the study as focussed as possible and maximise the use of resources.

#### **4. Work Package 1 (WP1) – International Review of Agriculture-Nutrition**

WP1 is an international review of development policy and practice in relation to ag-nutrition linkages, through a desk review.

The following issues and questions were discussed;

- *What is the aim of this review?*
- *Who are we aiming to inform – target audience?*
- *Do we want policy recommendations?*
- *Do we want online comments from just us or more NGOs, ELDIS open API (allows them to link to others etc)*
- *Who will do the design and print?*

It was agreed that WP1 should be the most up to date research and evidence – a synthesis/review to update our own knowledge, and to use to link WP1 to WP2 – to help start a dialogue with policymakers – and to use to inform and influence.

The point was made that we have to do this first as an overview for the rest of the project. So a main target is project stakeholders as well as policy makers – ie this is what happened in Asia and Latin America, so what can we learn or perhaps consider for Africa and more specifically, Ethiopia and Tanzania?

***Summary – Pull out the global evidence..... summarising and packaging in an accessible way for a policy audience, but making the issues and lessons specific to Ethiopia and Tanzania, helping inform the approach we should take.***

***i.e. - Reviewing and summarising the lessons learned globally in terms of both policy and methodology, focussing in particular on those issues most relevant to Ethiopia and Tanzania.***

***Action – Jessica to finalise the objectives and scope of WP1 including schedules***

## 5. Work Package 2 – Country Studies

Tassew Woldehanna of EDRI made a short presentation on Ethiopian agricultural policy.

It was noted that the focus of Ethiopian agricultural policy had moved from small-scale farmers under the Transitional government, to export-focussed under the Sustainable Development and Poverty Reduction Program (SDPRP) up to 2005, then commercial scale farming under the Plan for Accelerated and Sustained Development to End Poverty (PASDEP) 2005-2010 and currently large-scale investments under the Growth and Transformation Plan (GTP) 2010-2015.

In all of the plans, small farms are seen as a vital part of the food security strategy and agriculture is regarded as the main engine of growth to 2015 by the GTP. However, there are few linkages between agriculture and nutrition policy, the latter of which remains under the jurisdiction of the Ministry of Health.

There is a quite good understanding by Government of Ethiopia that nutrition is a cross-sectoral issue – but nutrition targets are under Health, and between agriculture and nutrition targets is not clearly spelled out in policy documents. There is a problem of implementation.

Overall Ethiopian agriculture policy has focussed on food rather than nutrition – calories rather than nutrients. There is also some question over the policy coherence of Ethiopia's agriculture policy – eg focussing on large scale investments which may encourage land grabs at the potential expense of food security.

With regard to Tanzania, agriculture is given priority but there is a gap in implementation. Region-specific differences are important, as is political commitment. There is a tendency to focus on food self-sufficiency (quantity) rather than on nutrients.

A number of research questions were posed for WP2;

1. To what extent has agricultural policy taken nutrition into account, both in terms of the stated policy and what is actually happening?
2. Is the primary focus of agriculture policy on increasing production of staple crops or increasing income through cash crops?
3. Is there evidence of sectoral links in government – eg between the Ministry of Health and Agriculture – and if so how effective are the links?
4. Does policy address intra-household (HH) issues and if so how?
5. Does policy address micronutrients and if so how?
6. How is policy addressing inputs such as fertiliser
7. How is policy addressing imperfect markets – eg when prices are high even with cash transfers people are not able to purchase sufficient food
8. How does policy address bargaining power within value chains?

It was noted that more work is required on value chains, particularly in regard to wastage and local procurement for stock-building.

## **6. Work package 6 – Pro-nutrition interventions**

Ethiopia has a National Nutrition strategy from 2008 under the Ministry of Health, which amongst other things is encouraging home gardens, orange-fleshed sweet potato production, etc. Before the Nutrition Strategy, policy was mainly focussed on food security as a path to nutrition security.

Practical interventions under the policy include;

- Food supplements
  - Iodization of salt
  - Vitamin A
  - Iodine oil capsules
- School feeding
- Employment generation
- Health extension

Usually the agricultural policy and programmes are not specifically linked to nutrition. The cross-sectoral link is very important, but in practice implementation is too sectoral. NGOs tend to engage in isolated efforts.

It was noted that this work package will be looking more at specific local interventions than national policies, using case study examples.

## **7. Work Packages 3&5 – Conceptual Framework and Household Survey**

### 7.1 Sokoine - Joyce Kinabo, Sokoine by Skype

Joyce Kinabo provided a summary of the current state of ag-nutrition research in Tanzania and suggestions for HH research.

Methodology suggestions for WP5;

- Set up a unit in a community area for anthropometric tests to reduce time spent surveying.
- Interviews should be done in the HH and include both men and women
- All members of the HH should be included for nutritional status measurements.
- Physical measurements of anthropometry - length, height, weight, mid-arm circumference – are the main measures to focus on
- Other tests could include haemoglobin level in blood, also iodine status, and perhaps zinc in urine and/or hair
- Interviews at HH level should include dietary intake, expenditure and all related socio-demographic info.

- People in Tanzania are reported to be usually ok with tests and quite willing to participate, but ethical standards and official permission are required (National Medical Research Council). Villages often look forward to participating in tests in order to assess their status, so feedback is important.
- Biofluid collection is conducted in Tanzania – eg establishing a unit in village then connecting to the local medical centre, with the samples put in ice for a few hours – but this is a costly process. Hemocue testing can be used relatively cheaply for iron.
- For the intake questionnaire a 24 hour recall or food frequency / dietary diversity is usually used. The HFIAS or HHS is also used.
- It was noted that there is a significant loss of nutrients in food processing and preparation which needed to be taken into account. This can be done through focus group discussions.
- Vitamin A status was mainly measured through breast milk and prevalence of night blindness. It was noted that bitots spots could also be used as a vitamin A indicator by experts.

## 7.2 UCC - Tom O'Connor

An extensive literature review revealed a wealth of recent data and reports available which could help the project, including the recent Ethiopia Demographic and Health Survey (EDHS). An online dropbox will be established so that partners can share the resources.

On the methodology, for the anthropometric measures the basic information required is - Age, Sex, Length (or Height) and Weight.

- Stunting – height (length) for age – chronically malnourished
- Wasting – weight for height – short-term acute undernutrition problem
- Underweight – weight relative to age, reflects both chronic and acute undernutrition
- Mid-Upper Arm Circumference (MUAC) – measure for acute malnutrition including adults

Nutrition problems are most important early in life as they can have long-lasting impacts, not only in physical problems but also intellectual impairment.

Anaemia is high in Ethiopia at 44% of children (aged 6-59 months - EDHS). The % of children consuming VitA rich foods is also important (EDHS showed only 26% of children consumed food rich in vitamin A in 24 hour-recall surveys) – supplementation of VitA would need to be taken into account in the HH surveys (EDHS - more than half children in Ethiopia received VitA supplements). Iodisation of salt is also a common practice (more in urban than rural) and should be accounted for in any survey work.

One approach for the dietary intake methodology is to determine what people eat and how much of it and then relate to food composition tables for nutrient intakes, such as 24-hour recalls. All methods have inherent problems. – eg 24 hour household recalls may not be reliable for the individual.

It was noted that there are recent food composition tables – Tanzania 2008, but the latest for Ethiopia are from 1995 (see Infoods database) available from the Ethiopian Health and Nutrition Research Institute

Some examples of agricultural interventions were cited to illustrate nutritional impacts; a study by John Mason showed that pastoralists were not stunted but were thin and a little wasted – as mothers had access to milk and blood nutrient-rich foods which promoted growth – Vitamin A, zinc etc, whilst agriculturalists in the same locality were stunted as they were not getting enough key animal food nutrients.

Another study was cited showing that cropping strategies in the highlands of Ethiopia gave different nutrient outcomes, whilst another showed that only 7% of calories were derived from animal products leading to insufficient nutrients, and another showed how high quality protein maize was helping to improve children's nutritional status.

The following issues were raised regarding the methodology for the household surveys.

1. Ethical approval
2. Selection of pastoralist and agriculturalist zones
3. Sampling within each zone and sample size (eg SMART methodology)
4. Seasonality – effects on diet and anthropometry
5. Anthropometry - correlation between maternal and child anthropometry
6. Vitamin A status – Bitots spot
7. Iron status - Hemocue
8. Iodine status (iodised salt) – urinary and goitre
9. Measurement household food security
10. Gender issues – male-headed, female-headed
11. Food intake – weighed, 24h recall, FFQ
12. Food composition tables
13. Calculate energy and nutrient intakes
14. Dietary diversity
15. Supplements
16. Relationship energy and nutrient intakes
17. Energy expenditure
18. Water and sanitation
19. De-worming and vaccinations
20. Access to health services and maternal care
21. Coping strategies
22. HH dependency ratios and anthropometry
23. Socio-demographic questionnaires – income, education status, HH size, land access, intra-HH priority access to food
24. How realistic are the survey methods chosen in relation to the time and resources available?

It was noted that there was a need for a nutritionist in Ethiopia as a mentor for the PhD work there. A new development in Ethiopia is the Health Development Army network of women who provide health-related packages to households, and may provide an important network source in the survey locations. There is also an ongoing household food consumption survey in the country, which could provide useful baseline information and networking sources.

Selome Gizaw from Irish Aid stressed that regional variations in nutrition needed to be accounted for and noted that IA can provide documentation on the website having commissioned many projects in this field over recent years.

## **8. Work Package 7 - Country-level Stakeholder Platforms**

### 8.1 Objectives

1. Convene stakeholders from both sectors (linkages)
2. Learn from existing work
3. Communicate our research findings
4. Advocacy/influencing based on our recommendations

### 8.2 Stakeholder Platform formats

1. Annual or semi-annual workshops
2. Community of Practice (eg Ag-Nutrition CoP (run by the World Bank), Solution Exchange)
3. Learning Events
4. E-mail circular/newsletters

#### ***Actionable Issues:***

- ***who is the target audience?***
- ***who are we communicating with?***
- ***who has the power to make changes?***
- ***who are we trying to influence?***

***We need to be pragmatic about the starting point of the platforms – partners can be invited based on existing relationships. Stakeholder platforms offer the chance to share learning with policy makers and also engage in the shaping of our research.***

***We need to undertake a quick mapping exercise – identify stakeholders e.g. through Irish Aid, Universities etc. We can start with 10-12 organisations.***

### 8.3 Stakeholder Identification and Mapping

In order to link agriculture and nutrition, the stakeholder platform would ideally include the key Ministry of Agriculture and Ministry of Health experts, plus key NGOs involved, plus agricultural extension, etc. It was felt that the platforms should start relatively small and build from key experience and knowledge and that the process needed to be started early.

Bringing the ag-nutrition issues into debate with practitioners and policymakers is a key value of the project in order to inform research, develop survey questionnaires etc.

The platforms should also find out how stakeholders like to be communicated with - ie to feed into WP8. They should also help to capture the attitudes and practices of key decision makers – eg semi-structured interviews of key decision makers to find out what they know and understand about how agriculture and nutrition are linked? We can use this as a monitoring tool, to see if knowledge changes over the project period.

## **9. Work Package 8 – Knowledge services**

IDS are taking the lead in this through the IDS Knowledge Services team. It was noted that it may be better to host the AGRIDIET project website with IDS in order to allow partners to contribute and update.

The sustainability of the AGRIDIET project Web Portal could be promoted by linking with the ELDIS API project so that the project information can be linked to other websites and databases and maintained long-term. Blogging pages, social media, such as Facebook and Twitter can be used, including links with key organisations and individuals. There should also be links to partner websites and the profile of the team should also be posted onto the website in order to promote funding for the next level, helping to strengthen the consortium.

Knowledge outputs would be largely from the various work packages. Training materials were also discussed but it was felt that more information was needed on how these might work and it was generally decided that this part of the project should be parked at least for the time being.

***Action WP7 – It was suggested that Irish Aid could be approached to convene policymakers, researchers and practitioners together for a first initial stakeholder platform early in 2013.***

***An e-mail circular was proposed to populate the main stakeholder categories covering the ag-nutrition spread in each country, which Jessica will lead.***

***Action WP8 – Steve to follow up with Jessica and IDS team on the website portal***

## **Day 2 – 22 November 2012**

### **10. Introduction to Conceptual Framework and Methodology for Surveys**

UCC presented a number of key concept frames that could be used to develop a conceptual framework for the project under work package 3.

The FAO FIVIMS food security concept frame was put forward as a useful starting point for illustrating the links between agriculture and nutrition, as well as Hawkes and Ruel's Food Value Chain to Nutrition framework, helping to identify activities and actors. A recent mapping study of research projects covering agriculture and nutrition linkages provided a useful framework of the linkages between agricultural interventions/practices and nutrition outcomes, including the indirect impacts of health and education intervening factors.

Guiding principles were also put forward for the methodology;

1. Interdisciplinary, with multi-authored papers
2. Integrated
3. Mixed methods – both qualitative and quantitative
4. Comparative between countries
5. Mutually supportive teams – so that researchers work together to collect data, with perhaps one central methods approach - recognising interdependence of the research approach.

### **11. Work Package 3 & 5 – Methodology and Survey**

Ten key issues on the household survey methodology were distilled from the previous day's workshop, on which key decisions were required from day two. The following guidelines were agreed by the team in order to develop the final methodology guideline document under Work Package 3.

#### **11.1 Site Selection of Survey**

Key factors in the choice of location were;

- 1) proximity to the university
- 2) the dominant pattern of farming and agri-ecological systems
- 3) vulnerability to food and nutrition insecurity

It was agreed there should be two sites in each country, chosen to be representative of different farming systems, but within areas vulnerable to food insecurity and within a reasonable proximity of the respective universities.

It was agreed that the sites should avoid any locations where "extreme" interventions had taken place over recent years, so as to be as representative as possible of the farming systems and vulnerable populations in the region. A sub-sample of households in the selected study sites would be used for the detailed nutrition survey

## 11.2 Sampling

It was felt that a sample size of a minimum 250/300 and maximum 500/600 in each site should provide sufficiently reliable numbers, although much would depend on the villages or kebeles or hamlets selected.

In the sampling of households it was noted that the Tanzania Census might provide a useful sampling frame for particular locations.

The samples should be stratified to ensure that there are a sufficient number of households with children under the age of 5, as well as both female and male headed households. Scale of farm should also be considered, but may not be required as a stratification criterion.

A sub-sample of households would be required for the nutrition surveys in one of the sites in each country, selected from those households with children under two and/or women of child bearing age, so as to be as representative as possible of the overall sample.

## 11.3 Measurement Issues

Dietary diversity was put forward as the most useful method of recording dietary intake for all households under the general questionnaire, usually over a previous 24-hour (eg household dietary diversity score) or up to previous 7-day period (eg food consumption score) for different food groups.

A 24-hour detailed food recall survey would probably be required for those households involved in the nutrition survey, although it was noted that this could take up to one hour per household to complete.

Anthropometric details of height/length, weight, mid-upper arm circumference and age of each member of the household would need to be collected as part of the detailed nutrition surveys. The target group for measurement should be particularly children aged 6-35 months, plus women of child-bearing age.

It was felt that the HHS (Household Hunger Scale) could be added to the questionnaire as a perception-based measurement, given that only 3 questions were required per household.

The questionnaire would also need to include vital questions for nutrition, such as the frequency of child diarrhoea and basic sanitation questions.

It was agreed that biomarkers and other more detailed measures might be too costly and time-consuming to conduct in the household survey, although it was noted that hemacue could be used to record iron levels relatively cheaply.

It was agreed there should be two rounds of surveys to take account of seasonality issues. Sampling should preferably be done in the pre-harvest period.

For agricultural measurement, info is needed on farming systems/practices and the agriculture knowledge system. Info is also needed from the wider economy including the market, relating to income and expenditure.

The importance of a team collecting data together was emphasised – too much use of enumerators can cause quality problems.

Intra-household food distribution issues also need to be addressed, as well as relationships between households, e.g. borrowing food.

#### 11.4 Qualitative and Quantitative Issues

A guiding principle of the project is to use mixed methods so the questionnaire should provide both quantitative data on nutrition and qualitative responses on behaviours and attitudes towards food and nutrition. It is important that the best approaches are used to gain the required information, so resistance areas are often caused by behaviour and attitude traits, best captured in qualitative questions, as are intra-household and cultural issues in food consumption.

A number of quantitative approaches were discussed including the Minimum Cost of Diet linear programming approach by Save the Children, and the potential to identify the best cropping patterns and rotations to maximise nutritional outcomes. Such data could be uploaded to a central system for all team members to use.

Researchers collecting qualitative data should maintain research journals and should be capable of critical reflection on their role as researchers while doing research. Life histories can be one approach to qualitative research.

The issue of the gender of researchers was also raised: where there are mostly male researchers, it might be important to employ local female Research Assistants.

#### 11.5 Comparative Analysis

The methodology used across countries should be as similar as possible allowing for some cross-country comparisons.

#### 11.6 Collection of data outside agriculture and nutrition

Information on sanitation and other health and illness related issues which could directly impact on nutrition, as well as education, needs to be collected in the household survey in order to assess their impacts relative to those of the agricultural practices. Information on livelihoods and income is also important to capture in the surveys. Information on activity levels (e.g. time spent in collecting water & fuelwood and time spent in the home) is important for nutritional analysis. The gender division of labour in agriculture is also important.

In measuring dietary intake, “typical” intakes should be measured, i.e. avoid extreme periods (fasting, festivals etc).

### 11.7 Value chain approach

Work package 4 is aimed at providing a detailed context for the household surveys, showing the major food value chains in the locality and beyond. It is therefore important that a typology of farming systems is identified for the area on which the value-chain research would be based. It may be possible to develop village economy models. Analysis of markets, including food availability and food prices is also important. The identification of fortification possibilities e.g. in food processing can also come from this analysis.

### 11.8 Ethical issues

Each organisation needs to ensure that the research meets any ethical standards required within its own organisation and in-country. The research would also need official clearance within each country. Informed consent would be needed for conducting the household survey, ensuring that those who participated were given adequate feedback. The gender of the researchers could also be an important issue in the nutrition research, where body measurements are taken.

Given that approval from ethics committees and from in-country governments for clearance could involve lengthy delays, the recruitment of PhDs and development of methodology and questionnaires should be finalised asap.

### 11.9 Role of supervisors and students

The project team needed to be careful not to overburden the students with too many responsibilities outside the household research. Thus, the supervisors would take a leading role in work package 4 on the local ag-systems and value chains with the assistance of the PhD students, whose primary focus would be the household surveys under Work Package 5.

### 11.10 Cost and Timeframe

These issues were dealt with under the budget and project implementation discussions - see below.

## **12. Reporting and Indicators**

UCC provided an overview of the performance indicators that needed to be agreed as part of the performance measurement framework. The indicators selected would be used to measure the performance of the project, so it was important that all the key objectives are covered. The final PMF, including indicators, needs to be submitted to Irish Aid in early February: therefore UCC will circulate a draft by 14<sup>th</sup> Dec to all partners for comment by mid-Jan. 2013.

### **13. Budget**

Provisional budgets were circulated to each partner for discussion. These were based on the budgets agreed by partners under the original proposal, adjusted for a 5 per cent reduction under Irish Aid instructions. The budget allocations for each work package were then discussed.

Under the work package 1 (international review) it was agreed that IDS as the lead would do the majority of work in drafting the report with only feedback inputs from EDRI and Sokoine. Under Work Package 2 on the national policy overviews, it was agreed that EDRI and Sokoine would take the lead in their respective countries, but that inputs should be budgeted from the other in-country partners.

On Work Package 4 it was agreed that there should be a re-allocation of days from UCC to UCD on the meso level and value chain research inputs.

On work packages 7&8, IDS will combine the total days allocated for work package 8 and re-allocate across 7 and 8 according to need. It was also noted that on work package 7 on the stakeholder platforms, days had only been allocated to EDRI and Sokoine, but that inputs from other partners needed to be budgeted.

On work package 9f (on supervisory visits) it was agreed that UCC days should be re-allocated to UCD in order to balance the totals.

Revised budgets will be calculated and sent out to partners.

A financial information form with brief provisional information on transferring funds was circulated to partners. Each partner should complete the pdf forms e-mailed to them (typed not handwritten) and send them back to the Project Manager.

It was noted that a template report had not yet been received by UCC from the Higher Education Authority (HEA) in Ireland. As this would be the basis for the release of funds every six months, it will be important for partners to keep good financial records and to ensure progress against the final work plan. The HEA template report will be circulated to partners as soon as it is received by UCC.

### **14. Project Implementation**

A draft schedule was circulated for the various work packages with a list of deliverables and deadlines.

WP1 – No changes with the draft report agreed for end-March 2013 and final by end-June.

WP2 – Deadlines were brought forward to end-May 2013 for the draft and September 2013 for final.

WP3 – The end-February deadline for the Methodology Guidelines report was left unchanged, with UCC to draft a report by end-December.

WP4 – Case studies and briefs will be produced on a regular basis, with case study 1 reports in each country completed by December 2013, case study 2 reports by September 2014 and case study 3 reports by March 2015.

WP5 – The first preliminary report was brought forward to October 2014, followed by a consolidated final report in Jun 2015

WP6 – The preliminary report deadline was left unchanged but the final report was brought forward to December 2013.

WP7 – The first stakeholder platform meeting was brought forward to Feb 2013, the second left unchanged at November 2013 and the third brought forward slightly to October 2014, with a final one added in September 2015.

WP8 – The web portal establishment was left unchanged at end-Jan 2013, as was the Knowledge Strategy draft at end-April 2013.

A detailed project implementation plan (work plan) will be drafted for the end of the year.

## **15. Research Agreements**

Draft research collaboration agreements were circulated to partners. It was noted that UCC legal departments had not provided feedback on the drafts at the time of the workshop and that amended drafts would be sent to the partners as soon as any required changes had been incorporated and agreed within UCC.

## **16. Close of Workshop**

Nick Chisholm thanked the delegates for their contributions over the two days of the workshop and the excellent progress that was made.

## AGRIDIET Inception Workshop, Addis Ababa, 21-22 November 2012

### List of Attendees

Name	Institution	Email address
<b>AgriDiet Team</b>		
Nick Chisholm	UCC	<a href="mailto:n.chisholm@ucc.ie">n.chisholm@ucc.ie</a>
Kathy Glavanis-Grantham	UCC	<a href="mailto:k.glavanis@ucc.ie">k.glavanis@ucc.ie</a>
Edward Lahiff	UCC	<a href="mailto:e.lahiff@ucc.ie">e.lahiff@ucc.ie</a>
Nora O'Brien	UCC	<a href="mailto:N.Obrien@ucc.ie">N.Obrien@ucc.ie</a>
Tom O'Connor	UCC	<a href="mailto:tpoc@ucc.ie">tpoc@ucc.ie</a>
Stephen Thornhill	UCC	<a href="mailto:s.thornhill@ucc.ie">s.thornhill@ucc.ie</a>
Aifric O'Sullivan	UCD	<a href="mailto:aifric.osullivan@ucd.ie">aifric.osullivan@ucd.ie</a>
Jim Kinsella	UCD	<a href="mailto:jim.kinsella@ucd.ie">jim.kinsella@ucd.ie</a>
Deirdre O'Connor	UCD	<a href="mailto:deirdre.oconnor@ucd.ie">deirdre.oconnor@ucd.ie</a>
Tassew Woldehanna	EDRI	<a href="mailto:tassew.woldehanna@gmail.com">tassew.woldehanna@gmail.com</a>
Girmay Tesfay	MU	<a href="mailto:girmay_tesfay@yahoo.com">girmay_tesfay@yahoo.com</a>
Jemal Yousuf	HU	<a href="mailto:jemaly2001@yahoo.com">jemaly2001@yahoo.com</a>
Bobbe Bedadi	HU	<a href="mailto:bobbedadi2009@gmail.com">bobbedadi2009@gmail.com</a>
Joyce Kinabo (by Skype)	SU	<a href="mailto:joyce_kinabo@yahoo.com">joyce_kinabo@yahoo.com</a>
Thadeus Mkamwa	SAU	<a href="mailto:thadeus.mkamwa@gmail.com">thadeus.mkamwa@gmail.com</a>
Ernest Nyanda	SAU	<a href="mailto:ernestnyanda@yahoo.co.uk">ernestnyanda@yahoo.co.uk</a>
Jessica Meeker	IDS	<a href="mailto:J.Meeker@ids.ac.uk">J.Meeker@ids.ac.uk</a>
Lawrence Haddad (by Skype)	IDS	<a href="mailto:L.Haddad@ids.ac.uk">L.Haddad@ids.ac.uk</a>
<b>Guests</b>		
Selome Gizaw	Irish Aid	
Tesfaye Ejigu	Irish Aid	
Aidan O'Hara	Irish Embassy	
Getachew Yoseph	EDRI	
Stefan Schulz	CIP	