



Food and Agriculture
Organization of the
United Nations

TRAINING REPORT

Integration of the Minimum Dietary Diversity-Women (MDD-W) module into Tajikistan's Household Budget Survey in Dushanbe, Gorno-Badakhshan Autonomous Oblast and the Regions under Republican Subordination Regions of Tajikistan

**Conference Hall, Agency on Statistics under the President of the Republic of Tajikistan,
Dushanbe, Tajikistan**

27 July - 31 July 2015



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In collaboration with



The training course on the integration of the Minimum Dietary Diversity-Women (MDD-W) module into Tajikistan's long-running Household Budget Survey (HBS) in Dushanbe, Gorno-Badakhshan Autonomous Oblast (GBAO) and the Regions under Republican Subordination (RRS) regions of Tajikistan was organized by the Food and Agriculture Organization of the United Nations (FAO) and the Agency of Statistics under the President of the Republic of Tajikistan (AoS). Financial contributions were made by the European Union and FAO within the *Improved Global Governance for Hunger Reduction* framework. We would like to acknowledge the contribution of Claudia Lazarte (workshop material preparation), Gulomjonova Zarina, Ashurov Jumahon and Khotamov Uktam (local workshop facilitators) and Khurshed Mayusupov (workshop interpreter).

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Acronyms and abbreviations

AoS	Agency of Statistics under the President of the Republic of Tajikistan
BMI	Body Mass Index
DDS	Dietary Diversity Score
DHS	Demographic and Health Survey
ESNA	Nutrition Assessment and Scientific Advice
EU	European Union
FANTA	Food and Nutrition Technical Assistance
FAO	Food and Agriculture Organization of the United Nations
FAOTJ	FAO Tajikistan
FAOHQ	FAO Headquarters
FDG(s)	Focus Group Discussion(s)
GBAO	Gorno-Badakhshan Autonomous Oblast
GDP	Gross Domestic Product
HBS	Household Budget Survey
MDD-W	Minimum Dietary Diversity-Women
RRS	Regions under Republican Subordination
SUN	Scaling Up Nutrition Movement
UNICEF	United Nations Children’s Fund
UNDP	United Nations Development Programme
USAID	United States Agency of International Development
USD	United States Dollar
WB	The World Bank
WDDS	Women Dietary Diversity Score
WHO	World Health Organization

1. BACKGROUND

Tajikistan consists of four administrative regions namely (i) Khatlon, (ii) Sughd, (iii) Gorno-Badakhshan Autonomous Oblast (GBAO) and (iv) the Regions under Republican Subordination (RRS), with the capital Dushanbe city. It has a total population of approximately 7.99 million people; of these, 4.13 million are females (49.4 percent) and 6.1 million people (73.5 percent) live in rural areas¹ (based on 2014 data). Tajikistan is one of the poorest countries in Central Asia with an average income per capita of 323.64 Somoni (~65 USD) (2014 data)¹. In 2013, the country ranked 133rd out of 187 in the Human Development Index (HDI) with 32.06 percent of its population living below the national poverty line². Poverty is higher in rural areas (50.8 percent), with the highest levels recorded in the Sughd region^{1,3}. Notwithstanding, according to preliminary estimates, Tajikistan's Gross Domestic Product (GDP) for the period January-December 2014 increased by 6.7 percent as compared to the same period in 2013⁴.

Despite its steady economic growth, the country faces high levels of malnutrition and of food insecurity. The World Bank and UNICEF (United Nations Children's Fund) estimate that malnutrition costs the country around USD 41 million annually⁵, attributed to lost productivity due to reduced cognitive and physical development in the population. Data from the latest 2012 Demographic and Health Survey (DHS) showed a high prevalence of malnutrition and micronutrient deficiencies among children and women of reproductive age (15-49 y):

- **Malnutrition;** a quarter of all children under five were stunted (nearly 50 percent severely stunted) and wasting affected around 10 percent of children under five. The prevalence of underweight among women of reproductive age decreased as compared to earlier surveys, mainly due to changes in food habits, however, the prevalence of over-nutrition increased, affecting more than 30 percent of women in this group⁴.
- **Main micronutrient deficiencies;** roughly 53 percent of children under five and 59 percent of women of reproductive age presented iodine deficiency. Iron deficiency was the main cause of anemia in these populations. Anemia affected 50 percent of children under two years old, and 29 percent of children under the age of five. The prevalence of anemia among women was 24 percent, the highest levels were found in GBAO and in RRS⁴.

¹ Tajikistan in Figures, 2013. Statistical Agency under the President of the Republic of Tajikistan (TAJSTAT).

² Human development reports, United Nations development programme, 2015. Retrieved from <http://hdr.undp.org/en/content/human-development-index-hdi-table>.

³ Food security and poverty N°4, 2014. Statistical Agency under the President of the Republic of Tajikistan (TAJSTAT).

⁴ Tajikistan Demographic and Health Survey, 2012. Statistical Agency under the President of the Republic of Tajikistan, USAID, FANTA III.

⁵ Situation analysis: Improving economic outcomes by expanding nutrition programmes in Tajikistan, 2012. WB, UNICEF.

In response to the alarming nutrition situation, the government of Tajikistan joined the Scaling Up Nutrition (SUN) movement in 2013, committing to improve nutrition of the people in Tajikistan. Furthermore, the government has prioritized the setting up of national information systems to understand and monitor the quality and diversity of people's diets through a simple and valid food-based indicator. In 2014, the Agency of Statistics of the Republic of Tajikistan (AoS), with technical support from the Food and Agriculture Organization of the United Nations (FAO), conducted a dietary diversity training course and pilot data collection in the Khatlon region. Following the success of the training course in 2014, AoS requested FAO to provide further training for local AoS staff in the remaining regions of the country. In 2015, FAO provided technical and financial support in conducting two training courses on the integration of the Minimum Dietary Diversity-Women (MDD-W) into the annual Household Budget Survey (HBS) in Tajikistan. The first one was conducted in April 2015 in the region of Sughd.

The MDD-W, an upgraded version of the WDDS (Women Dietary Diversity Score), is a standardized proxy indicator of women's dietary diversity collected at individual level. It counts the number of food groups that a person consumed over the preceding 24-hours. MDD-W is a 10-food group indicator, with a cut-off at five food groups to indicate the minimum dietary diversity. Women eating five or more food groups are more likely to meet the minimum dietary diversity than women eating four or fewer food groups. The HBS is used in Tajikistan to collect information on the households' socioeconomic status. The questionnaire is also useful to identify women of reproductive age, who are eligible for an individual MDD-W interview. The information collected in the HBS/MDD-W would be invaluable for identifying nutritional targets, regular monitoring and evaluation on the impacts of nutritional interventions, and devising programmes to improve food security and nutrition in Tajikistan.

The purpose of the second training course was to provide capacity development and train the trainers in order to enable the AoS to collect MDD-W data by integrating it into the HBS in Dushanbe, GBAO and the RRS regions of Tajikistan. The trainers would become facilitators in future training courses, to run pilot studies and data collection in the country. The five-day training course combined theory and practice in order to reinforce the knowledge and skills of the enumerators through supervised data collection. After completion of the training course, enumerators would immediately start to conduct a pilot study to collect MDD-W data in the Dushanbe, GBAO and the RRS regions of Tajikistan. The pilot study consists of household interviews with at least 300 women of reproductive age (15-49 y) who represent one of the vulnerable groups at high risk of malnutrition and micronutrient inadequacies in Tajikistan.

2. PLACE AND DURATION OF THE TRAINING COURSE

The training course was held at the AoS conference hall in Dushanbe, Tajikistan. The duration of the training was five days, from 27 to 31 July 2015. The training course included the theoretical part of MDD-W, followed by interactive group exercises, local adaptation of the MDD-W questionnaire and field practice. The adaptation exercise and field practice were conducted in three Jamoats of the Rudaki district. The training course also included a brief introduction and practice of anthropometric measurements and was brought to completion with data entry and analysis of collected information during the household interviews. The detailed agenda is provided in ANNEX 1.

3. IMPLEMENTATION OF THE TRAINING COURSE AND PARTICIPANTS

The training course was delivered by the Nutrition Assessment and Scientific Advice Team (ESNA), Nutrition Division, FAO:

- Warren T.K. Lee, Senior Nutrition Officer FAOHQ
- Theodora Mouratidou, International Nutrition Consultant FAOHQ
- Sabir Kurbanov, National Consultant FAOTJ

Twenty-six participants attended the training course: 22 enumerators, two trainers from the AoS office in Dushanbe, and one trainer from Khujand and Kurgantube respectively (the full list of the participants is provided in ANNEX 2).

4. ACTIVITIES OF THE TRAINING COURSE

Activities of the training course are described below. Detailed information concerning the exercise plan for the course is given in ANNEX 3.

4.1 Day-1. Classroom work

4.1.1 Welcoming remarks and participant's expectations of the training course

Mr Shodmon Shokirzoda, AoS First Deputy Director and Mr Abduvali Qulov, AoS Head of Demography, Employment and Social Statistics Department delivered the welcoming remarks. Both emphasized the importance of the training course to develop capacity of the AoS staff in the national food security information systems, as well as the importance of integrating the MDD-W into the HBS to regularly collect nutrition information. Participants introduced themselves, giving brief information about their backgrounds and informing if they had previous experience with nutrition assessment tools. To make the introduction more interesting and relevant, participants were asked to suggest one local food that they liked and would like to recommend to others. They wrote down their expectations of the training

course and foreseeable challenges in conducting MDD-W: these are presented in section 4.4.2.

4.1.2 Presentation of the objectives of the training course

The aim of the training course was to enable participants to familiarize themselves with the MDD-W tool, and specifically:

- understand the background, principles and application of MDD-W in assessing food security and nutrition at country level;
- be aware of the strengths and weaknesses of the tool;
- be able to adapt and apply the tool to their local context;
- be able to code, analyze and interpret the collected data.

Additionally, the training course provided introduction to some simple anthropometric measurements, namely weight and height to derive Body Mass Index (BMI) and its interpretation.

4.1.3. Lecture: Description of the Dietary Diversity Score (DDS) and outline of practical implementation

Warren T.K. Lee delivered technical presentations on the DDS highlighting the following points:

- DDS is a simple food-based indicator on micronutrient adequacy of diets for individuals.
- Dietary diversity is a key element of high quality diets.
- DDS could be a useful tool to provide timely warning for the preparation of actions against the outbreak of food insecurity events (e.g. to prevent famine). It can be used to assess food security at different levels:
 - a. at household level, as a proxy indicator for financial access to foods in the household;
 - b. at individual level, as a proxy indicator for dietary quality and micronutrient status;
 - c. at national level, to monitor and evaluate the quality of dietary intake and nutrition intervention programmes;
 - d. at global level, as a standard indicator to monitor and compare quality of the diet across countries.

Sabir Kurbanov, National Consultant at FAOTJ, presented an overview on the food and nutrition security situation in Tajikistan stressing the level of malnutrition and micronutrient deficiencies in women and children.

4.1.4. Group exercise: 24-hour recall

The MDD-W questionnaire was introduced to the participants; it was presented as a rapid and easily administered dietary assessment tool. The questionnaire includes two parts: a 24-hour dietary recall and a table of food groups. The recall method is meant to capture the diet of an individual on usual days and interviewers should aim at collecting information to reflect an individual's typical diet. The 24-hour recall questionnaire should itemize everything that the respondent ate or drank (meal/tea-break/snacks) whether at home or outside home. Instructions for administering the MDD-W questionnaire are attached in ANNEX 4. The 24-hours period starts from the moment the woman woke up in the morning of the previous day until the moment she woke up in the morning of the present day (in ANNEX 5 an example of a 24-h recall questionnaire).

Afterwards, a role-play was performed in order to demonstrate how to carry out a 24-hour recall and how to classify the collected information into a table of food groups, followed by probing respondents for any food group not spontaneously mentioned. After the role play, participants were asked to work in tandems to practice the 24-hour recall method, and then report in full any difficulty encountered. Participants asked some questions after the practice session. In this regard, they were advised that all enumerators should know and agree upon the definition of special/atypical days (such as feast days and ceremonies) before starting data collection. If a respondent is on a special diet for a short period of time, the enumerator should reschedule the interview for a day when the respondent returns to regular eating habits. A questions and answers document (ANNEX 6) was provided to all enumerators for use during data collection.

4.1.5. Lecture and practice: Anthropometric measurements

A lecture about anthropometrics was given to introduce the principles and uses of anthropometric measurements and to instruct participants on how to take proper measurement of weight and height. Participants practiced the measurements in pairs and wrote down the measures on an anthropometric data collection form (ANNEX 7). The data were entered in Excel spreadsheets to calculate BMI and to interpret the results.

4.2 Day-2. Classroom and field work

4.2.1. Lecture: Adaptation process

A lecture was given to explain the adaptation process of the MDD-W questionnaire to the local context for use in the Dushanbe, GBAO and the RRS regions. The following points were covered and clarifications given as follow:

- *Why is there a need for adaptation?* –Each population has particular cultural characteristics and eating habits. Therefore, there is a need for adaptation in order to obtain a questionnaire which is relevant to the local context, local food culture, easy to understand by the respondents and consistent to be used by the enumerators.
- *When should adaptation be conducted?* – Prior to data collection.
- *What does adaptation involve?* – The adaptation process involves:
 - a. appropriate translation of the questionnaire into a local language;
 - b. adaptation to local meaning, term and definition used for foods, drinks, snacks, meals as well as patterns;
 - c. adaptation of food lists to reflect locally available foods, mixed dishes and ingredients.
- *How is it conducted?* – The adaptation process includes the following steps:
 1. key informant interviews;
 2. focus group discussion;
 3. household interviews;
 4. interview training.

4.2.2. Field work: Adaptation process

Trainers and participants were transported to the Rokhati Jamoat of Rudaki district to carry out steps 1 and 2 of the adaptation process:

1. Interviews with key informants were held at the Rokhati Jamoat in order to obtain specific information on local foods, beverages, meals and dishes, which were necessary to adapt the MDD-W questionnaire to this region. Facilitators from AoS led the interview by raising questions to the key informants and guiding the discussion (ANNEX 8, list of questions for key informants). Key informants were farmers, teachers, office clerks and housewives who have local knowledge of foods and food customs, and are involved in planning and preparation of meals (ANNEX 9, list of key informants);
2. Focus group discussions were arranged with local women from the Rokhati Jamoat (ANNEX 10, list of participants in the focus group discussions). The dialogue was focused on the information obtained from the key informants. The participants and locals were actively involved in the discussion. They contributed to the compilation of a comprehensive list of local food items, dishes and recipes necessary for adapting the MDD-W questionnaire.

The adaptation process was finalized with further amendments of:

- a. a list of locally available foods in Dushanbe region (ANNEX 11);

- b. a list of most common mixed dishes classified by meals in Dushanbe region (ANNEX 12);
- c. an MDD-W questionnaire.

4.3 Days 3 and 4. Field work practice

The fieldwork practice consisted of household interviews in the Guliston and Qiblai Jamoats of the Rudaki district. The participants were split into two groups; each group included eleven enumerators, one to two AoS facilitators, one FAO staff and an interpreter. During these two days, enumerators were required to undertake interviews in different households with at least three women of reproductive age (15-49 years old), and to take measurements of their weight and height. FAO staff and facilitators supervised the participants in data collection. After the field training, there was a debriefing session on adaptation process and field work. The following points were raised and subsequently clarified:

- The MDD-W questionnaire is based on a qualitative 24-h recall and its results do not reflect average nutrient or food intake.
- The obtained score makes sense only at population level; therefore enumerators should not assume that the individual-based scores are used as the final output of the process.
- MDD-W is a universal indicator: however, it still needs to be adapted to the local context in order to be more comprehensible and should also be translated in the local language. Thus, there has to be an agreement on the terminology to be used in the questionnaire including the name of foods, eating occasion, mixed dishes and ingredients contained in every mixed dish. Thereafter, agreed changes should be integrated into the questionnaire and an updated version of it shall be used in the fieldwork.
- Enumerators should use guidance materials provided by the trainers including the list of common mixed dishes to prompt any ingredient forgotten during the 24-h recall etc.
- Enumerators should clearly introduce the survey process to respondents, monitor the amount of time spent in the survey per individual and enquire for foods and drinks eaten in-between the three main meals.
- Enumerators should first complete the interview process e.g. 24-hour list and probing and then should proceed with completing part 2 of the questionnaire e.g. table of food groups.
- It was also emphasized on various occasions, that foods consumed in quantities less than one table spoon (15 grams) per day but not per meal, should not be underlined in the food groups. Except for condiments, spices, salt, which are in group 16.
- While conducting the survey, enumerators should avoid asking leading questions that might condition the respondents to answer in a certain way. It is recommended to use open questions such as “Did you have anything else aside from what you have already mentioned at breakfast, lunch, dinner or snacks?” rather than mentioning any specific food item.

- More guidance was given on how to interpret unusual days, considering that in the Tajik culture it happens very often to visit or to receive visitors (friends and relatives). Thus, such days should be considered as usual days as these are normal activities of the Tajik people and eating patterns are not significantly different from normal days.
- Regarding anthropometric measurements, participants did not have any major problems with taking them. What became obvious during the 2-day fieldwork was the need for practice and proper guidance till enumerators mastered the technique. Logistical problems included cultural barriers e.g. respondents did not always agree or feel comfortable in having their height and weight measured by male enumerators.

After all the recommendations and clarifications, the MDD-W questionnaire was revised and finalized in English and Tajik (the English version is provided in ANNEX 13).

4.4 Day-5. Classroom work

4.4.1. Lecture and practice: Coding, calculation and data analysis

Coding, data analysis, interpretation and reporting of the results were described and practiced during the last day of the training course. Some key points were explained:

- The 16 food groups in the MDD-W are aggregated into ten food groups (ANNEX 14) to calculate the final score between 0 – 10 food groups, with the cut-off at five food groups. A score equal or higher than five indicates a higher probability that a woman meets the minimum dietary diversity than women eating four or fewer food groups.
- Results after data analysis can indicate the percentage of women consuming each food group as well as the frequencies by age, geographic location, season, socio-economic status and other variables.
- Scores can also denote households consuming food groups that are rich sources of specific nutrients (e.g. vitamin A).
- MDD-W tool can be applied to a national or local level through integration into the existing HBS model and can be easily adapted for either urban or rural areas. The tool is useful for national nutrition surveillance, to assess baselines and to track the nutrition impact of food and nutrition interventions.

Calculation of BMI and MDD-W score was demonstrated using the data collected during the two previous days (based on 22 subjects). Each participant entered one set of data they had collected into Excel spreadsheets. Results of BMI demonstrated that the majority of the people interviewed in the previous days seemed to be overweight (according to the BMI classification for Asian populations). Calculation of MDD-W score showed an average of six food groups, implying that the interviewed population met the minimum dietary diversity. The participants were also guided to manually code and calculate the MDD-W score. This exercise was to demonstrate that scoring and analysis of data is straightforward and not

complicated at all. Nevertheless, it is preferable to use a computer programme to enter large amount of data to avoid mistakes and reduce the time for data analysis.

4.4.2. Group exercise: Did the training course meet participants' expectations?

The expectations indicated by the participants on day-1 of the training course, were reviewed and are summarized below.

Expectations Day-1	Were the expectations achieved? Day-5
To acquire new knowledge and skills on the integration of the MDD-W into the HBS and the ways of implementation in the field	Nearly all participants answered that after the training course they had acquired knowledge and skills to apply the MDD-W successfully in the field
To gain knowledge on local food items and ingredients and how to use this knowledge in our future	Nearly all participants answered that the training course had successfully enabled them to obtain a better view and knowledge on local foods and ingredients used in the region and that this knowledge would be useful in future data collection
To gain new information on the food security situation in the country	All the participants agreed that they increased their knowledge in food security and nutrition situation in the country and they very much appreciated the usage of indicators to support decision making

Regarding anticipated challenges, they expressed concerns on not receiving complete answers from the women, on possessing limited knowledge of the matter (e.g. food and nutrition) and on foreseeing difficulties in recruiting sufficient number of participants. Later on, participants filled in the end-of-training evaluation questionnaire (23 evaluation forms were reviewed: however, not everyone responded to each question of the evaluation form) (ANNEX 15). For 91 percent of respondents, the training met their expectations, whereas for nine percent expectations were only met to some extent. Most of the participants (63 percent) had a high degree of confidence (rate 4 on a scale 1-5, with 5 being the highest) in performing the associated tasks (i.e. adaptation of the DDS to the local context, classification of collected information into food groups, conducting focus group discussions, 24-hour recall interviews, data analysis and presentation of the results) following the training, and 30 percent felt fully confident (rate 5 on a scale 1-5, with 5 being the highest) in undertaking these tasks.

4.4.3. Concluding remarks

Mr Shokirzoda, Mr Qulov and Mr Lee delivered the closing remarks, some of which are summarized below:

- AoS will consider the feasibility of future integration of the MDD-W module into the on-going HBS considering also the results of the two 2015 pilot studies;
- It was stated once again the importance of integrating the MDD-W into the HBS in Tajikistan in support of future policies and strategies targeting vulnerable population groups;
- The pilot studies in Dushanbe, GBAO and the RRS regions targeted data collection from at least 300 women of reproductive age (15-49 y). AoS personnel will enter the data into Excel spreadsheets. FAOHQ will perform statistical analysis and report the results;
- Sabir Kurbanov from FAOTJ will closely monitor the development of the pilot study;
- ESNA/FAOHQ staff will provide necessary technical support to the AoS for conducting the pilot study as well as for the future support in integration of the MDD-W into their national HBS.

ANNEX 1. Agenda of the training course on integrating the MDD-W into the Household Budget Survey, Dushanbe, Tajikistan, 27 - 31 July 2015

DAY 1 (27th July)			
	Topic	Speaker	Materials
09:00-09:30	Registration	All participants	Name tag + training material pack
09:30-09:45	Welcoming Remarks	Shodmon Shokirzoda (First Deputy Director, AoS) Abduvali Qulov (Head of Demography, Employment and Social Statistics Department, AoS) + Warren T.K. Lee (Senior Nutrition Officer FAO)	
09:45-10:00	Introduction of participants and administrative matters	Sabir Kurbanov (National Nutrition Consultant) + All participants	
10:00-10:30	SESSION 1. What do the participants expect from the workshop?	Theodora Mouratidou (International Nutrition Consultant) + Sabir Kurbanov + Facilitator AoS + All participants	Flip charts + markers+ cardboards
10:30-10:50	Workshop objectives	Warren T.K. Lee	Projector
10:50-11:00	Food and nutrition security situation in Tajikistan	Warren T.K. Lee + Sabir Kurbanov	Projector
11:00-11:15 Coffee break			
11:15-11:45	1-Overview of the development of the Dietary Diversity Indicators + Q&A	Warren T.K. Lee	Projector
11:45-12:30	2-Description of the Dietary Diversity tools + Q&A	Warren T.K. Lee	Projector
12:30-13:30 Lunch			
13:30-14:00	SESSION 2. Role play: Demonstration of the method + probing questions+ Q&A	Theodora Mouratidou + Facilitator AoS	Flip charts+ markers+ EX1+ projector
14:00-15:00	SESSION 3. Group exercise: practice of the 24 hour-recall and probing questions	Theodora Mouratidou + Facilitator AoS + All participants	Flip charts+ markers+ EX1 + list of local mixed dishes
15:00-15:15 Tea break			

15:15-16:00	SESSION 4. Group exercise: Participants' feedback on 24 hour recall exercise	Theodora Mouratidou + All participants	Projector+ Flip charts+ markers
16:00-16:15	6 -Description Anthropometric measurements	Theodora Mouratidou	Projector
16:15-17:00	SESSION 5. Demonstration of anthropometric measurements, and practice	Theodora Mouratidou + Facilitator AoS + All participants	Scale + tape
17:00-17:30	Preparation of the field work (assign participants and interpreters to teams and logistic details)	Sabir Kurbanov	
DAY 2 (28th July)			
08:30-09:00	5-Dietary diversity tool: need for adaptation to the local context + Q&A	Theodora Mouratidou	Projector
09:00-09:30	Transportation to the Jamoat (Rohati Jamoat of Rudaki district)	All participants	
09:30-10:00	Introduction to the Jamoat of Rohati	Head of the Jamoat	
10:00-12:30	SESSION 6. Adaptation exercise with key informants <i>(coffee/ tea, snack served during discussion)</i>	Warren T.K. Lee (leading discussion) + Sabir Kurbanov + Theodora Mouratidou + Facilitator AoS +All participants	Flip Charts + Markers
12:30-13:00	Transportation to the conference hall	All participants	
13:00-14:00 Lunch			
14:00-15:30	SESSION 7. Group exercise: Classification of collected information into food groups	Warren T.K. Lee (leading discussion) + Theodora Mouratidou + Sabir Kurbanov + Facilitator AoS+ All participants	Projector + Flipcharts+ Markers + EX2 + List of mixed dishes+ DDS guidelines
15:30-16:00	Transportation to Ruadaki district	All participants	
16:00-17:30	SESSION 8. Focus group discussions (2 groups of women) <i>(coffee/ tea, snack served during discussion)</i>	Warren T.K. Lee and Theodora Mouratidou (leading discussion) + Sabir Kurbanov + Facilitator AoS + All participants	Flipcharts + Markers +(updated) EX2 + (updated)List of mixed dishes+ DDS guideline
17:30-18:00	Transportation back to the conference hall	All participants	

DAY 3 (29th July)			
09:00-10:00	SESSION 9. Group exercise: classification of collected information into food groups and finalization of the questionnaire for interviews with women aged 15-49y at households + Q&A - Grouping participants into two groups for household interview	Warren T.K. Lee and Theodora Mouratidou (leading discussion) + Sabir Kurbanov + Facilitator AoS + All participants	(updated) Flipcharts+ Markers +(updated) EX2+ (updated)List of mixed dishes+ DDS guideline
10:00–10:15		Coffee break	
10:15-12:00	(Continue) Group exercise: classification of collected information into food groups and finalization of the questionnaire for interviews with women aged 15-49y at households + Q&A - Grouping participants into two groups for this exercise	Warren T.K. Lee and Theodora Mouratidou (leading discussion) + Sabir Kurbanov + All participants	
12:00-13:00		Lunch	
13:00-13:30	Transportation to the Rudaki district	All participants	
13:30-17:30	SESSION 10. Interviews with women aged 15-49y at households + Q&A	All participants	Finalized questionnaires + guidelines + list of local mixed dishes
17:30-18:00	Transportation back to the conference hall		
DAY 4 (30th July)			
08:30-09:00	Transportation to the village	All participants	
09:00-12:30	(Continue) Interviews with women aged 15-49y at households	All participants	Finalized questionnaires + guidelines + list of local mixed dishes
12:30-1300	Transportation to the conference hall	All participants	
13:00-14:00		Lunch	
14:00-14:30	Transportation to the Rudaki district	All participants	
14:30-17:30	(Continue) Interviews with women aged 15-49y at households	All participants	Finalized questionnaires + guidelines + list of local mixed dishes

17:30-18:00	Transportation back to the conference hall	All participants	
DAY 5 (31st July)			
08:30-09:00	SESSION 11. Debriefing of the field work : Discussion to summarize the experience with the adaptation and implementation process Participants of each group present their reflections on the adaptation and implementation process	Warren T.K. Lee (leading discussion) + Facilitator AoS + All participants	Flip charts + markers
9:00-09:30	SESSION 12. Debriefing of the field work: Discussion of difficulties and further clarifications + Q & A Overview of the adaptation and implementation process	Warren T.K. Lee (leading discussion) + Sabir Kurbanov + Theodora Mouratidou + Facilitator AoS + All participants	Projector + Flip charts+ markers
09:30-09:45	The Practicality and challenge of integrating DDS into HBS	Abduvali Qulov	Projector
09:45-10:30	3- Coding, data analysis and reporting of dietary diversity scores + Q&A	Warren T.K. Lee	Projector
10:30-10:45	Coffee break		
10:45-11:15	SESSION 13. Group exercise: Coding and calculation of WDDS Demonstration of data entry	Theodora Mouratidou + Facilitator AoS + All participants	Projector + EX1
11:15-11:45	SESSION 14. Q&A: Overall evaluation of workshop and discussion of data entry and analysis of DDS	Warren T.K. Lee (leading discussion) + Facilitator AoS + All participants	Flip Chart + Markers
11:45-12:15	Evaluation of workshop	All participants	Evaluation questionnaires
12:15-12:30	Closing remarks	Shodmon Shokirzoda+Abduvali Qulov + Warren T.K. Lee	
12:30 – 13:30	Lunch		

ANNEX 2. List of participants in the training Course on integrating the MDD-W into the Household Budget Survey Dushanbe, Tajikistan, 27 - 31 July 2015

	Name	Region	Position
1	Abduvali Qulov [*]	Dushanbe	Head of Demography Department, AoS
2	Gulomjonova Nazira [*]	Dushanbe	Department of AoS
3	Ashurov Jumahon ^{**}	Kurgantube, Khatlon	Head of Demography Department of Khatlon AoS
4	Khotamov Uktam ^{**}	Khujand, Sughd	Leading specialist of HBS of the Sughd region
1	Nurulloeva Zulhumor	Shohmansur	HBS enumerator
2	Azimova Mahbuba	Somoni	HBS enumerator
3	Haitov Zikrullo	Sino	HBS enumerator
4	Saidov Olimjon	Sino	HBS enumerator
5	Murodbekova Farida	Firdausi	HBS enumerator
6	Norova Shodona	Firdausi	HBS enumerator
7	Norova Mohira	Gissar	HBS enumerator
8	Qalandarov Saidahmad	Gassar	HBS enumerator
9	Sherbuttaev Ochildi	Shahrinai	HBS enumerator
10	Rajabova Marjona	Tursunzade	HBS enumerator
11	Eshmirzoev Bahodur	Tursunzade	HBS enumerator
12	Sheralieva Zulfiya	Vahdat	HBS enumerator
13	Rahimov Pirmahmad	Vahdat	HBS enumerator
14	Zaydulloev Qodir	Rudaki	HBS enumerator
15	Nahriddinov Habobullo	Faiyzabad	HBS enumerator
16	Akhmetova Elena	Rogun	HBS enumerator
17	Davlatshoev Ramihudo	Khorog	HBS enumerator
18	OjibangievaTojinisso	Khorog	HBS enumerator
19	Dastambaev Eraj	Khorog	HBS enumerator
20	Aqdodova Sabzina	Shugnon	HBS enumerator
21	Nusratov Nazar	Vanj	HBS enumerator
22	Amirhonov Fayzullo	Ishkoshim	HBS enumerator

* AoS central office facilitator

** AoS regional facilitator

ANNEX 3. Exercise plan for the training course on integrating the MDD-W into the Household Budget Survey, Dushanbe, Tajikistan, 27 - 31 July 2015

<p>SESSION 1: What do the participants expect from the workshop? (20 mins)</p> <p>Moderator: Theodora, Sabir, Facilitator AoS and Interpreter</p> <p>Method:</p> <ul style="list-style-type: none"> • Divide into 6 groups randomly (3-4 participants per each group) • Select 1 group representative • Discuss the following questions which will be displayed on the screen (10 mins) <ol style="list-style-type: none"> 1. What do you expect to gain from the MDD-W training 2. Any challenges you can anticipate in conducting MDD-W in the field 3. Any other expectations • The group representative write their answers on the memos (use colors of memos to categorize the answers for each question) and paste them on the flipcharts under the corresponding questions (10 mins) • Result will be reviewed at the end of the 5-day training • Materials: flipcharts (3 papers with written questions in English and Tajik), pens, colorful memos, cutter/scissors, markers, tapes
<p>SESSION 2: Demonstration of the method (30 mins)</p> <p>Moderator: Warren, and Interpreter</p> <p>Flip chart and underline: Warren and Sabir</p> <p>Demonstration: Theodora and Facilitator AoS</p> <p>Method:</p> <ul style="list-style-type: none"> • Role-play • Steps: please refer to the instructions for administering MDD-W (for Taji) • Theodora and Facilitator AoS conduct the interview • Warren and Sabir write down the food items divided by meals on flipcharts in both English and Tajik • Warren introduces the underline part • Warren and Sabir underline the food items on the food groups in both English and Tajik (on screen) • Theodora and Facilitator AoS then continue the part of probing questions • Material: Exercise sheet (EX1), pens, wooden board, flipcharts (with written forms in both English and Tajik), projector, list of food group table on screen (both English and Tajik), list of local mixed dishes
<p>SESSION 3: Group exercise: Exercise for MDD-W training: Interview, underline the food items and probing (1 hour)</p> <p>Moderator: Theodora, Facilitator AoS and Interpreter</p> <p>Method:</p> <ul style="list-style-type: none"> • Role play • Divide into 6 groups randomly (3 participants per each) to do the practice in tandem <ol style="list-style-type: none"> 1. Trainers walk around and provide instruction 2. Everyone should play as interviewer and interviewee once 3. Participants who is not in the role play can act as observer and note down the problem and difficulties 4. Remind the participants to keep the exercise sheet (EX1) throughout the training period • Material: Exercise sheet (EX1), pens, papers/notebook, list of local mix dishes, MDD-W instructions sheet
<p>SESSION 4: Group exercise: Participants' feedback on 24 hour recall exercise (45 mins)</p> <p>Moderator: Theodora and Interpreter</p>

Flip Charts: Facilitator AoS and Sabir

Method:

- After the role play exercise, participants discuss with their group mates about the problems and difficulties encountered (**15 mins**)
- Select 1 group representative and present the summary of their discussion (**20 mins, ~3 mins for each group**)
- Theodora and Sabir help mark the main points on the flip charts in both English and Tajik
- Final remark by the trainer (**10 mins**)
 1. Integrate their sharing as well as point out the problems spotted
 2. Provide advice
- **Material: Flipcharts, pen, markers, notes/papers**

SESSION 5: Demonstration of anthropometric measurements, and practice

Lead of discussion: Theodora , Facilitator AoS and Interpreter

Method:

- Theodora will demonstrate how to take anthropometric measurements, Facilitator AoS acts as volunteer
- Divide into 6 groups randomly (3 participants per each) to do the training in tandem
- Everyone should take measurements of the 2 participants in their group
- Trainers walk around and provide instruction
- **Material: Scales, tape, anthropometric measurements form**

SESSION 6: Adaptation exercise with key informants (2.5 hours)

Lead of discussion: Warren, Facilitator AoS and Interpreter

Flip charts: Theodora and Sabir

Method:

- Round table discussion
- Key informants and participants should sit in opposite direction and face each other
- Number of key informant : 8-10
- Remind the participants that they will lead the focus group discussion in the afternoon.
- Warren leads the discussion and ask questions
- Participants can ask for clarification by raising hand and remind them to take notes
- Theodora and Sabir will take notes on the flipcharts in English and Tajik
- **Material: Flip charts (Table of food groups, List of local food items and mix dishes) , pens, markers, checklist of the questions, notebook, Food composition table (2-3 copies as references), MDD-W instructions sheet**

SESSION 7: Group exercise (classification of collected information into food groups) (1.5 hour)

Moderator: Warren, Theodora and Interpreter

Flip charts: Facilitator AoS and Sabir

Method:

- Trainers will lead the discussion according to the meeting with key informant
- Discuss altogether the food group one by one and update the list of food items of each food group
- Discuss the recipes per dish and by meal to ensure every ingredient is listed clearly
- The participants should update their own recipes and the food items within each food group according to the final decision
- Sabir and Theodora update the flipchart and in softcopy
- **Materials: Flip charts (Table of food groups ,List of local mix dishes), Exercise sheet (EX2), pens, markers, checklist of the questions, notebook, Food composition table (2-3 copies as references), MDD-W instructions**

SESSION 8: Focus group discussions (FGD) (1.5 hours)

Moderator: Warren, Theodora and Facilitator AoS

Interpreter: Interpreter and Sabir

Method:

- In each FGD, two group are formed: 1 trainer + interpreter + 10 Participants + 4 key informants (per group)
- The focus group members and participants should sit in opposite direction and face each other
- One participant will be the leader of the discussion and one will be secretary to take notes for the whole discussion. Other participants have to follow the discussion and take notes. They can also ask for the clarification by raising hand.
- Moderator will assist in the discussion
- **Material: Updated EX2 and List of local mixed dishes, pens, checklist of the questions, notebook, flipcharts of previous session, Food composition table (2-3 copies as references), MDD-W instructions**

SESSION 9: Group exercise: Classification of collected info into food groups and finalization of the questionnaire for field study + Q&A (~3 hours)

Moderator: Warren, Theodora and Interpreter

Flip charts: Facilitator AoS and Sabir

Method:

- Trainer will lead the discussion according to the meeting with FGD
- Discuss altogether the food group one by one and update the list of food items of each food group
- Discuss the recipes per dish and by meal to ensure every ingredient is listed clearly
- The participants should update their own recipes and the food items within each food group according to the final decision
- Finalized the questionnaire and list of mixed dishes
- Participants can ask for any clarification about the questionnaire and upcoming interview
- Print Finalized MDD-W questionnaire and list of mixed dishes for household interview
- **Materials: Flip charts (Table of food groups, List of local mix dishes), Exercise sheet (EX2), pens, markers, checklist of the questions, notebook, Food composition table (2-3 copies as references), MDD-W instructions**
- **Print the final version of updated questionnaire (TAJ *60, ENG *5), Print the local mixed dish (TAJ*20, ENG*3)**

SESSION 10: Household interviews (~11 hours)

Team leader: Warren, Theodora, Facilitator AoS

Translator: Interpreter and Sabir

Method:

- Form two groups and lead by one trainer and one interpreter
- Every participant needs to interview at least 3 respondents to gain practical experience.
- 1 participants will be the interviewer, other will observe and mark down the problem and difficulties encountered
- Trainer will provide advice and guidance during the interview
- **Material: The finalized MDD-W questionnaire, The finalized local mixed dishes as reference, pens, papers/notebook, instruction note, wooden boards, folder**

SESSION 11. Debriefing of the field work:

Discussion to summarize the experience with the adaptation and implementation process (30 min)

Moderator: Warren, Facilitator AoS and Interpreter

Flip Chart: Theodora and Sabir

Method:

- Divide into 4 groups with 5 participants in each group
- Participants of each group present their reflections on the adaptation and implementation process (3 min each)
- Theodora and Sabir mark the main points on flip Charts (both in English and Tajik)
- **Materials: The finalized MDD-W questionnaire, the most updated list of recipes, pens, papers/notebook, flipcharts, markers**

SESSION 12. Debriefing of the field work : Discussion of difficulties and further clarifications (30 min)

Moderator: Warren, Facilitator AoS and interpreter

Flip Chart: Theodora and Sabir

Method:

- Participants can ask for clarification and share the difficulties encountered at this section
- Trainer provide advice according to the request of participants
- Same materials as the previous session

SESSION 13: Group exercise: Coding, Calculation and demonstration of data entry (30 min)

Moderator: Theodora, Facilitator AoS and Interpreter

Method:

- Participant code the answer from **household interviews** in the previous 2 days (**15 min**)
- Aggregate 16 groups into 10 groups and calculate the MDD-W according to the reference on EX1 (page 3)
- Report the MDD-W of those women one by one
- Calculate the average MDD-W of the community visited
- Introduce the Mask
- Demonstrate the entry process and calculation
- **Material: MDD-W questionnaires used in household interview, EX1 (page 3), pen, Excel spreadsheets for demonstration**

SESSION 14. Q&A : Overall evaluation of the workshop (30 min)

Moderator: Warren, Theodora, Sabir, Facilitator AoS and Interpreter

Method:

- Trainers will lead the discussion according to the activities carried out during the workshop
- Check if the expectations written by the participants the 1st day of the workshop were met
- Discuss altogether, participants can comment on the workshop and ask further questions
- **Material: Flip chart, markers**

ANNEX 4. Instructions for administering the MDD-W Questionnaire

1. Introduce yourself and explain the purpose of the interview clearly in layman language.
2. Fill in the MDD-W Code and demographic information, make sure all items are filled in correctly (call out the answer to the respondent)
3. Ask the respondent if the previous day was a usual/typical day in terms of their food intake. Ask if they consumed more or less than usual. If the previous day's intake was usual then continue with the questionnaire.
4. Explain to the respondent that you are going to ask her a series of questions about the food and drink that she consumed the previous day or the last 24-hour. The 24-hour cycle lasted from the time she got up in the morning yesterday until at the time she got up in the morning today. It doesn't matter that the recall period spans over two calendar days. Both inside and outside home food consumption are counted. Tell the respondent that there are no correct or incorrect answers.
5. If the respondent is the one who is responsible for cooking in the family, remind her that you are going to ask about the diet that she actually consumed but not the diets of her family.
6. Ask the respondent to think back to yesterday, to the time she woke up in the morning. Ask her to tell you the first thing she ate or drank – record this in the free recall space. For the Tajik eating habits, the first foods eaten in the morning are usually at breakfast. You should also ascertain if she ate or drank anything in between the time she got up in the morning and the breakfast.
7. Continue asking “after breakfast, when was the next meal, food, or drink she consumed?” And record everything including water in the open space. Continue through the entire day until the respondent went to bed. Be cautious that some women might eat or drink at night, e.g. Lactating mothers breast feed infants at night. Use local names for meal occasions such as breakfast, lunch, dinner, meal, tea and shirini. Record these items in the space provided in the questionnaire.
8. Probe for food, drinks, tea and shirini eaten between the three main meals with the respondent. Probe for added foods such as sugar in tea, jam in bread, oil in mixed dishes or greens in soups and salads.
9. For any mixed dishes (e.g. plov, shurbo or mantu) record each ingredient in the free recall space. Please refer to the recipes in the document “List of common mixed dishes classified by meals”.
10. Apply the minimum quantity rule, **excluding** food groups that contain quantity less than 15g per day (but not per meal) (15g is roughly about one tablespoon). Except for salt, spices, foods and condiments in group 16.
11. After the respondent recalls all the foods and drinks consumed, start underlining the corresponding foods items listed in the appropriate food groups. Underline food items in the food groups meal by meal in chronological order in order to avoid confusion. For foods or dishes not listed in any food group, write it in the “Remark” column on the questionnaire and discuss with the supervisor.
12. Write “1” in the column next to the food group if at least one food in this group has been underlined. Do not write “0” in the column next to the food group at this stage if no food items have been underlined in the food group.
13. Continue to probe for food groups where no food was underlined. It is not necessary to read out to the respondent the exact name of the food group, but simply ask (for example) about

fruits, vegetables or tubers if these groups were not previously reported. Write “0” in the column next to the food group when it is certain that no foods in that group were eaten.

14. For foods with unknown ingredients; write down the name of the food in the “Remarks” section at the end of the questionnaire. Ask the respondent to check the ingredients from the person who prepared the foods and get back to you later. Alternatively if the food was bought from the market, go and check the ingredients from the shop in the market.

ANNEX 5. Example of a 24-hour recall collected in Dushanbe region, Tajikistan

Time: 07:00	Meal/ Tea break/ Shirini: Breakfast
Shirchoy (milk, butter, bread and sugar), tea	
Time: 10:00	Meal/ Tea break/ Shirini: Tea break
Time: 12:30	Meal/ Tea break/ Shirini: Lunch
Shurbo (soup) – meat, potatoes, onion, carrot, oil, nuts, green vegetables, tomato. plain tea (no sugar), bread, Salad - tomatoes, cucumber, onion, green vegetables	
Time: 15:30	Meal/ Tea break/ Shirini: Shirini
Time: 19:00	Meal/ Tea break/ Shirini: Dinner
Oshi palow – rice, beef meat, oil, onion, carrot, Salad - tomatoes, cucumber, onion, green vegetables, bread, tea, water	
Time: 22:00	Meal/ Tea break/ Shirini:
fruits, water	

ANNEX 6. Frequently asked questions and answers for MDD-W questionnaire

1. How many enumerators should be present at the household to undertake MDD-W interview with the respondent?
No more than 2 enumerators should be present in the household; otherwise, the respondent would feel uncomfortable, in particular among women, and she might refuse to be interviewed.
2. What is the target group in the household for MDD-W data collection?
The target individuals in the household are women at reproductive age, i.e. 15-49 years old. It is desirable to interview the woman who prepares foods for the family if there is more than one woman meeting the criteria in the same household.
3. If the target woman in the household is not available or if the previous 24-hour was not a usual/ typical day, what should we do?
Only one woman meeting the selection criteria should be interviewed. The enumerator should make a future appointment to visit the target woman again in a few days' time. Alternatively, if there is a woman in the household falling within 15-49 years of age and meeting the selection criteria, the enumerator may consider interviewing this woman as an alternative.
4. What are unusual/ untypical days that the enumerators should not base on which to collect MDD-W information?
i. Unusual/ untypical days refer to those days in which food habits of the sample population are different from usual days, such as Ramadan, religious ceremonies with feasts and other ceremonies. At the same time, food habits of most people at country, region, district, jamoat or family level are also different from usual days. However, celebrations of birthdays, weddings, family visits, eating out at restaurants, etc. that are customary in Tajikistan should be regarded as usual days.
ii. Respondents with acute health conditions, such as surgical operations, fasting for medical treatments or diarrhea, etc. should be regarded as unusual days. While respondents with chronic disease conditions such as diabetes, high blood pressure or coronary heart diseases, etc. that need to follow a special diet for life, food recall on those long-term special diets should be regarded as usual days.
iii. Respondent fast for a few days with religious reasons prior to Ramadan should be regarded as unusual days.
5. Should we consider eating at parent's, friend's or neighbor's places as usual/typical days?
It should be usual days because these events are popular in the Tajik's culture.
6. Shall the enumerator record all foods that the woman prepared for the family including those she did not actually eat?
It is the foods and drink actually consumed by the woman herself should be recorded in the questionnaire. Any foods, drinks or dishes, although prepared by the woman, but were not actually consumed by herself should not be recorded.
7. Shall the enumerator record food or drinks consumed by lactating women after she has gone to bed at night in order to practice breastfeeding?
Yes, any food consumed from the time getting up in the morning during yesterday until the time she got up in the morning as of today, including foods or drinks taken overnight, should be recorded in the questionnaire.

8. Is there any difference between grouping sweet pepper (bulgori) red in color and green in color?

Sweet pepper (bulgori) red in color is high in vitamin A than those with other colors. Red color sweet pepper should be grouped under Group 3 (Vitamin A rich vegetables and tubers), while green and other colors sweet peppers should be grouped under Group 5 (other vegetables).

9. What about foods or drinks eaten at any time during the day, e.g. nuts, chocolate, fruits and dried fruits or tea?

Enter these item(s) in the space provided for tea breaks/ shirini between main meals corresponding to the time she consumed the food or drink during the day.

10. Shall greens (herbs) be grouped under Group 16 (Spices, condiments, beverages) if any of these greens (herbs) is/are consumed in a large quantity?

Greens or herbs should be entered into Group 4 (dark green leafy vegetables, DGLV) when the amount consumed is at least one table spoon per day. If consumption is less than one table spoon per day, these greens or herbs should be considered as condiments and grouped under Group 16.

ANNEX 7. Anthropometric measurement forms for data collection

Question	Answer
Name of interviewee	
Weight (kg)
Height (cm)

ANNEX 8. Questions for key informants and focus group discussions

1.	Discuss the meaning of food, meal, snack, staple food, drinks (e.g. how many meals they consume per day? When do they consume these meals? What kind of staple food they eat? What are the other foods? What do they usually drink?).
2.	Appropriate terms, in local language, for food, meal, snack, staple food, drinks.
3.	List the locally available foods and those that will be seasonally available during the data collection period (Use the MDD-W food group table as a reference).
4.	List the commonly prepared mixed dishes (Ask them for the ingredients, usual ingredients and optional ingredients and record consumption according to meals, use the list of mixed dishes as a reference).
5.	Foods consumed in very small quantities (e.g. Spices, herbs or other condiments, would they consume each of these items in quantities equal/more than 1 tablespoon per day?
6.	What are the most common foods gathered from the wild? Think of green leafy vegetables, wild fruits, fish, insects, other small animals.
7.	Are there any vegetables or roots/tubers which have a dark yellow, or orange colored inside flesh?

ANNEX 9. List of key informants in the Rokhati Jamoat Dushanbe region, Tajikistan

#	Name	Occupation
1	Abduroziq	former teacher, farmer
2	Hakimboy	office clerk (jamoat)
3	Davronali	farmer
4	Qurbon	farmer
5	Abduvosid	office clerk (jamoat) , farmer
6	Karimboy	farmer
7	Halimahon	housewife

ANNEX 10. List of participants in focus group discussions in the Rokhati Jamoat Dushanbe region, Tajikistan

#	Name	Occupation
1	Nazirahon	office clerk (jamoat)
2	Saodat	office clerk (jamoat)
3	Bibigul	housewife
4	Guliston	housewife
5	Hanifa	housewife
6	Zaynabhon	housewife
7	Lutfiya	housewife
8	Jamilahon	housewife
9	Shoirahon	farmer
10	Sharifa	teacher at primary school

ANNEX 11. List of locally available foods in Dushanbe region, Tajikistan

Number	Food group	Locally available foods
1	Cereals	Wheat, barley [perlofca], buckwheat, maize, rice, pasta, wheat bread, other bread, wheat flour, other flour, pasta products, kirieshki (snack made from flour), pop corn
2	White roots and tubers	Potato, turnip (yellow, red), radish
3	Vitamin A rich vegetables and tubers	Pumpkin, carrot, red sweet pepper (bulgori), squash
4	Dark green leafy vegetables (DGLV)	- Spinach, rhubarb, siyoalaf, bargi salat; - Dill, coriander, mint, parsley, blue basilica, green garlic, green onion, sorrel, wine leaves, jagh-jagh { Consider as DGLV when consumed at least one table spoon of these vegetable(s) per day. Otherwise, go to Group 16}
5	Other vegetables	Cabbage, cauliflower, garlic, cucumber, leek, tomato, onion, eggplant, beetroot, mushrooms fresh and dried, anzur , green beans, green pepper
6	Vitamin A rich fruits	Apricot and dried apricot, peach and dried peach, persimmon, cantaloupe melon
7	Other fruits	Apple, banana, lemon, watermelon, mandarin, grapes, pears, melon, muskmelon, fruits and berries, dried fruits and berries, raisins, oranges, cherries, figs, plum, pomegranate, prune, quince, raspberries, strawberries, blackberries, mulberries, king mulberries, yellow cherry, plum (orange-color), sinjid, chelon, dulona (haw), kiwi, pineapple, grapefruit, simorodina, hips
8	Flesh foods and organ meat	Beef, mutton, goat, chukar, rabbit, chicken, goose, turkey, quail, sausages, veal, lamb and chevron, meat of wild animals and games, sausage products and smoked meat, horse, duck, ox tail, liver, kidney, heart, lung,, stomach, intestine, tongue, brain (goat and sheep), spleen [ssiyohlavak] (cow, goat and sheep),
9	Eggs	Quail eggs, chicken eggs, goose eggs, turkey eggs, duck eggs
10	Fish and sea foods	Fresh and frozen fish, canned fish, smoked fish, dried fish, caviar, crab sticks
11	Beans and peas	Mung bean, peas, red beans, white beans, lentils, chickpeas, split peas
12	Nuts and seeds	Sesame seed, pistachios, almonds, pumpkin seeds, sunflower seeds, walnuts, peanuts, apricot seeds, hazelnut, pecan
13	Milk and milk products	Milk, skim milk, sour milk, yogurt, qurut (dried yogurt), ice-cream, kefir, chaka, kaymak (sour cream), cheese, sour cream/smetana, powdered milk, condensed milk, tvorog, falla (colostrum from cow), goat milk

14	Oils and fats	Vegetable oil (sunflower, flax, sesame, cotton,olive), butter, sheep fat, margarine, mayonnaise, ravgani zard (oil prepared from kaimak and butter), mahsar/saflo oil (plant oil), mixed oil (animal fat and vegetable oil), turta (sediment of boiled kaymak), potato chips, cow fat, sheep fat
15	Sweets	Sugar, honey, candies, chocolate, cakes, biscuits, jam, halva, baklava, obinabot (crystalised sugar), nishollo, shirini tut (Tajik snicker, mulberry paste with sugar)
16	Spices, condiments, beverages	<ul style="list-style-type: none"> - black pepper, cumin, ketchup, salt, pripava (adviya), chicken/ beef cubes; balsamic vinager, vinager; - dill, coriander, mint, parsley, blue basilica, green garlic, green onion, sorrel, rosemary (small green leaves), black sesame seeds, bay leaf. {Consider as condiments when these vegetable(s) are consumed less than one table spoon a day. Otherwise, go to Group 4}; - coffee, black and green tea, khuch, fruit drinks (compote), sweet soda, water

ANNEX 12. List of most common mixed dishes classified by means in Dushanbe region, Tajikistan

A Breakfast		Ingredients
1	Black and green tea	Tea, sugar , honey
2	Boiled eggs and sausages (boiled/ fried)	Egg, oil, beef, chicken, soy bean, onion, greens, ketchup
3	Bread	Wheat flour, salt, variation: butter
4	Butter or margarine	Cow milk , maska
5	Chalpak	Wheat flour, oil, salt, greens, onion
6	Fried potatoes/ boiled potato	Oil, potatos, onion, variation: beef
7	Havloi tar	Wheat flour, sugar, oil, water/milk
8	Jam/murabbo	Fruits, sugar, water
9	Kefir/Yogurt/Qatiq	Kefir/Yogurt/Qatiq
10	Mannaya kasha	Semolina, milk, sugar, butter
11	Oshi omuch	Locally made wheat starch, milk, yellow oil or butter
12	Omelets	Egg, wheat flour, greens, oil
13	Orzuq	Wheat flour, oil, salt, milk, egg
14	Otala	Fried wheat flour with oil, milk, salt, water
15	Pancakes	Egg, wheat flour, egg, milk, oil, sugar
16	Kaymak	Kaymak (cream)
17	Shirbirinj	Milk, rice, salt, butter, water
18	Shirchoy	Tea,milk, salt, sometimes wallnuts are added,
19	Shirkadu	Pumpkin boiled into milk, salt, sugar
20	Shirravaghum	Milk, oil (maska), sometimes Kaimak is added
21	Smetana	Smetana (sour cream)
22	Quymog	Wheat flour, water, vegetable oil, chicken, egg
B. Lunch/ Dinner		Ingredients
1	Borsh	Beetroots, cabbage, beef meat, onion, carrot, potato, tomato
2	Bread	Wheat flour
3	Damlama	Cabbage, carrot, potato, meat (beef or lamb), onion, oil, greens, chickpeas, garlic
4	Fatir	Wheat flour bread containing oil
5	Fruits	Apple, pear, peach, cherry, plump, pomegranate, grape, mandarin, kiwi, banana
6	Goluptsi	Sweet pepper (or cabbage), minced beef/mutton meet, onion, rice, grape leaves, oil, salt, water, condiments
7	Greens	Parsley, coriander, dill, sorrel, spring onions
8	Gushtbiryon	Fried meat (beef or lamb or goat) , onio, oil, condiments
9	Kadubiryon	Fried pumpkin, onion, oil, salt, sugar

10	Kalla pocha	Intestines, stomachs, leg, head of lamb, chickpeas, onion, greens all boiled, condiments
11	Kefir/Yogurt	Kefir/Yogurt
12	Kotlet	Minced meat (beef), onion, dried bread, oil
13	Lagman	Homemade noodles, oil, meat, vegetables, potatoes, herbs
14	Makaron plov /pasta plov	Oil, macaroni, meat, carrot, onion, tomato
15	Mantu	Wheat flour to make a steamed dough, meat (or pumpkin), onion, oil, local variation: potatoes
16	Mastova	Rice, oil, carrot, potato, meat, tomato, peppers, chickpeas, greens, sometime chakka is added
17	Moshkichiri	Mung beans, beans, oil, rice, carrot, onion, salt
18	Non-plov/ bread plov	Dried bread, onion, carrots, oil, potato, local variation: eggs
19	Okroshka	Cucumber, kefir, dill, mashed meat or sausage, egg, greens, radish
20	Fatir	Wheat flour, butter/ravgani zard
21	Fatir maska	Wheat flour(fatir), butter, milk
22	Plov/ osh	Rice, beef or mutton, chickpeas, carrots, onion, oil, condiment: cumin, hot pepper powder, dill, parsley, coriander, blackberries
23	Qalama	Wheat flour(dough), oil, eggs, sugar, sour cream
24	Qurutob	Small pieces of fatir (crashed wheat bread) hot water, yoghurt and cucumber, tomato, onion, oil, green vegetables and meat
25	Rasolnik	Meat, oat, cucumbers, carrot, oil, potato, greens
26	Sambusa	Wheat flour to dough, meat, onion, oil, cooked in the traditional oven-tandoori or oven, local variation: greens, lagh-lagh
27	Shakarob	Tomatoes, cucumber, onions, oil, herbs, greens
28	Shashlik	Grilled meat (beef, lamb, chicken, turkey, liver) and condiments
29	Shavla	Onion, carrot, small pieces of meat, water, oil, and can be prepared without meat
30	Shurbo	Meat (beef/lamb), carrots, potatoes, oil, onion, herbs, variations: peas, chickpeas, tomato, sweet pepper
31	Tea	Tea, black or green, sugar, honey
32	Tuppa	Wheat flour to make boiled dough cut in small pieces, vegetables served with boiled vegetables (beans, peas, coriander), onion, tomato, carrot, yellow turnip. Yogurt can be added before eating
33	Tushbera/pelmeni:	Noodle dough filled with meat in soup, tomato, onion, oil
34	Ugro:	Wheat flour, oil, onion, chickpeas and greens, wheat noodles, meat, tomato, carrot, potato, yellow turnip, mugbeans
35	pickles	Pickles (cucumber, tomatoes)
36	Moshgurunj/Moshshula	Mug beans, rice, onion, carrot, potato, meat, tomato, oil

3. Snack/ tea break (Shirini/ Advia)		Ingredients
1	Biscuits	Biscuits
2	Bread	Bread
3	Cakes	Cakes
4	Chakchak	Fried dough with eggs and sugar/honey
5	Chocolate	Chocolate
6	Cookies	Cookies
7	Dried fruits	Dried fruits
8	Jam	Jam
9	Kefir	Kefir
10	Pickles	Pickles
11	Tajik Snicker	Mashed mulberry with sugar
12	Toast/ Dried bread	Toast/ Dried bread
13	Nuts, pistachio, almonds, sunflower/pumpkin seeds	Nuts, pistachio, almonds, sunflower/pumpkin seeds
14	Halvoitar	Wheat flour, sugar, milk or water, walnuts
15	Chocolate	Chocolate
16	Dried mulberry	Dried mulberry
17	Nishollo	Delicacy from sugar and whipped egg
18	Potato chips	Potato, oil, salt
19	Pop corn	Corn, oil, sugar, variation: sugar

ANNEX 13. MDD-W questionnaire used for data collection

Statistics Agency under the President of Tajikistan

Household Budget Survey - Add to Form 2

Household No (from HBS):

Minimum Dietary Diversity – Women

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Name of the enumerator:	
Date of interview: (dd/mm/yyyy)	

Part 1 – Demographic information of interview

Please fill in the blank and tick the appropriate boxes.

Question	Answer	Code for entry (if applicable)
Name of interviewee		
Date of Birth (dd/mm/yyyy)	D D M M Y Y Y Y	
Age		
Occupation		
Number of Children		
Sex	Male <input type="checkbox"/>	0
	Female <input type="checkbox"/>	1
Marital Status	Single <input type="checkbox"/>	0
	Married <input type="checkbox"/>	1
	Divorced <input type="checkbox"/>	2
	Widow <input type="checkbox"/>	3
Education level	No Education <input type="checkbox"/>	0
	Primary School (1-4) <input type="checkbox"/>	1
	Secondary School (5-9) <input type="checkbox"/>	2
	Secondary School (10-11) <input type="checkbox"/>	3
	Middle- level Education (college) <input type="checkbox"/>	4
Pregnant	No <input type="checkbox"/>	0
	Yes <input type="checkbox"/>	1
Lactation	No <input type="checkbox"/>	0
	Yes <input type="checkbox"/>	1
Responsible for food preparation	No <input type="checkbox"/>	0
	Yes <input type="checkbox"/>	1
	Partial <input type="checkbox"/>	2
Living area	Rural <input type="checkbox"/>	1
	Urban <input type="checkbox"/>	2

Part 2 – 24-hour dietary recall

Please describe the foods (meal/ tea break/ shirini) that you ate or drank yesterday, whether at home or outside the home. Start with the first food or drink of the morning.

Write down all foods and drinks mentioned. When composite dishes are mentioned, ask for the FULL list of ingredients.

When the respondent has finished, probe for meal/ tea break/ shirini not mentioned

Time:	Meal/ Tea break/ Shirini:
Time:	Meal/ Tea break/ Shirini:
Time:	Meal/ Tea break/ Shirini:
Time:	Meal/ Tea break/ Shirini:
Time:	Meal/ Tea break/ Shirini:
Time:	Meal/ Tea break/ Shirini:

Part 3 – Table of Food Groups

After the respondent recalls all the food and beverages consumed, underline the corresponding foods in the list under the appropriate food group. For any food groups not mentioned, ask the respondent if a food item from this group was consumed. Write '1' in the column next to the food group if at least one food in this group has been underlined. If the food is not listed in any group, write it in the remark page (p.4) and discuss it with the supervisor.

Question Number	Food group	Locally available foods	Yes=1 No=0
1	Cereals	Wheat, barley [perlofca], buckwheat, maize, rice, pasta, wheat bread, other bread, wheat flour, other flour, pasta products, kirieshki (snack made from flour), pop corn	
2	White roots and tubers	Potato, turnip (yellow, red), radish	
3	Vitamin A rich vegetables and tubers	Pumpkin, carrot, red sweet pepper (bulgori), squash	
4	Dark green leafy vegetables (DGLV)	- Spinach, rhubarb, siyoalaf, bargi salat; - dill, coriander, mint, parsley, blue basilica, green garlic, green onion, sorrel, wine leaves, jagh-jagh {Consider as DGLV when consumed at least one table spoon of these vegetable(s) per day. Otherwise, go to Group 16}	
5	Other vegetables	Cabbage, cauliflower, garlic, cucumber, leek, tomato, onion, eggplant, beetroot, mushrooms fresh and dried, anzur , green beans, green pepper	
6	Vitamin A rich fruits	Apricot and dried apricot, peach and dried peach, persimmon, cantaloupe melon	
7	Other fruits	Apple, banana, lemon, watermelon, mandarin, grapes, pears, melon, muskmelon, fruits and berries, dried fruits and berries, raisins, oranges, cherries, figs, plum, pomegranate, prune, quince, raspberries, strawberries, blackberries, mulberries, king mulberries, yellow cherry, plum (orange-color), sinjid, chelon, dulona (haw), kiwi, pineapple, grapefruit, simorodina, hips	
8	Flesh foods and organ meat	Beef, mutton, goat, chukar, rabbit, chicken, goose, turkey, quail, sausages, veal, lamb and chevron, meat of wild animals and games, sausage products and smoked meat, horse, duck, ox tail, liver, kidney, heart, lung,, stomach, intestine,tongue, brain (goat and sheep), spleen [ssiyohlavak] (cow, goat and sheep),	
9	Eggs	Quail eggs, chicken eggs, goose eggs, turkey eggs, duck eggs	
10	Fish and sea foods	Fresh and frozen fish, canned fish, smoked fish, dried fish, caviar, crab sticks	
11	Beans and peas	Mung bean, peas, red beans, white beans, lentils, chickpeas, split peas	
12	Nuts and seeds	Sesame seed, pistachios, almonds, pumpkin seeds, sunflower seeds, walnuts, peanuts, apricot seeds, hazelnut, pecan	
13	Milk and milk products	Milk, skim milk, sour milk, yogurt, qurut (dried yogurt), ice-cream, kefir, chaka, kaymak (sour cream), cheese, sour cream/smetana, powdered milk, condensed milk, tvorog, falla (colostrum from cow), goat milk	
14	Oils and fats	Vegetable oil (sunflower, flax, sesame, cotton,olive), butter, sheep fat, margarine, mayonnaise, ravgani zard (oil prepared from kaimak and butter), mahsar/saflo oil (plant oil), mixed oil (animal fat and vegetable oil), turta (sediment of boiled kaymak), potato chips, cow fat, sheep fat	
15	Sweets	Sugar, honey, candies, chocolate, cakes, biscuits, jam, halva, baklava,	

		obinabot (crystalised sugar), nishollo, shirinii tut (Tajik snicker, mulberry paste with sugar), pechak	
16	Spices, condiments, beverages	<ul style="list-style-type: none"> - black pepper, cumin, ketchup, salt, pripava (adviya), chicken/ beef cubes; balsamic vinager, vinager - dill, coriander, mint, parsley, blue basilica, green garlic, green onion, sorrel, rosemary (small green leaves), black sesame seeds, bay leaf. {Consider as condiments when these vegetable(s) are consumed less than one table spoon a day. Otherwise, go to Group 4}; - coffee, black and green tea, khuch, fruit drinks (compote), boiled water, sweet soda, water 	

Remarks:

ANNEX 14. Aggregation of food groups to calculate the MDD-W score

Question number(s)	The 10 Food groups	Score
1,2	All starchy staples	
11	Beans and peas	
12	Nuts and seeds	
13	All dairy	
8, 10	Flesh foods (including organ meat and miscellaneous small protein)	
9	Eggs	
4	Vitamin A-rich dark green leafy vegetables	
3, 6	Other vitamin A-rich vegetables and fruits	
5	Other vegetables	
7	Other fruits	
MDD-W (sum of the above scores)		

ANNEX 15. Results of the end-of-training course evaluation

Please rate the overall quality of the training					
	Weak	Fair	Good	Very good	
Clarity of the objectives of the training			15	8	
Any comment	<i>Very good information on women's nutrition interpretation was very simple and understandable</i>				
Relevance of the presentations		2	14	6	
Any comment	<i>Relevant for acquiring of new knowledge and information in regard pilot survey; information/knowledge we will apply during survey;</i>				
Sufficient space allocated for discussion and exchange		5	12	6	
Any comment	<i>Longer time allocation for discussion could be better</i>				
Quality of the material			13	10	
Any comment					
Quality of the trainers			9	14	
Any comment	<i>very easy to communicate; high score;</i>				
To what extent do you feel confident in doing each of the following? (rate 1-5)					
	1	2	3	4	5
Adaptation of the DDS to the local context (with key informants)			1	14	8
Any comment	<i>Adaptation process was completely new for us; dietary diversity score was adapted to local situation;</i>				
Classification of collected info into food groups				16	7
Any comment	No comments				
Conducting focus group discussions			2	16	5
Any comment	No comments				
Conducting 24 hour-recall in household interviews			2	14	7
Any comment	<i>Process was very good, but due to lack of knowledge we didn't participate actively in overall process</i>				
Data analysis			1	14	8
Any comment	No comments				
Data presentation			1	14	8
Any comment	No comments				