**Indicators to be collected at farmer level using Form 6 – MARCH 2016**

| No. | Indicator | Question Numbers for indicators collected from Form 6  And  Formulas |
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|  | Gross margin per unit of land, kilogram, or animal of selected product (crop/animal/fisheries selected ( varies by country) | Formula for gross margin  **[(TP x VS/QS) – IC] / UP**  **TP= TOTAL PRODUCTION** (production for coffee, maize & beans)  **VS = VALUE OF SALES** (sales – Kgs x price used to sale, made by the farmers for the three commodities, and convert to USD @ 3410 rate of March 2016)  **QS = QUANTITY VOLUME OF SALES** (Kgs sold for each commodity)  IC = RECURRENT CASH INPUTS (cost of all inputs used, improved seed, fertilizer, chemical, shellers, hired labour, silos)  UP = UNITS OF PRODUCTION (land or acres used for production for each commodity, convert to hectares by dividing total acres by 2.5)  **COFFEE**  **TP = Qtn 38 (Kgs),**  **VS = Qtn 41**  **QS = (Qtn38-Qtn 40)**  **IC = Qtn 37, (a, b, c, d, g)**  **UP = Qtn 4 and Qtn12**  **MAIZE**  **TP = Qtn 38 (Kgs)**  **VS = Qtn 41**  **QS = (Qtn39-Qtn 40)**  **IC = Qtn 37, (a, b, c, d, g)**  **UP = Qtn 4**  **BEANS**  **TP = Qtn 37, under coffee Qtn 3 if answer is 2 (Kgs)**  **VS = Qtn 40**  **QS = (Qtn38-Qtn 39)**  **IC = Qtn 36, (a, b, c, d, g)**  **UP = Qtn 3**  To extrapolate for each crop.  Production (TP) = Kgs from sample multiplied by (commodity farmers sampled divided by total farmers sampled multiplied by total number of farmers). To convert production to Metric tons divide by 1000  Value of sales (VS) = Sales from sample multiplied by (commodity farmers sampled divided by total farmers sampled multiplied by total number of farmers). Kgs sampled multiplied by product in the brackets. To convert sales to USD multiply by 3410 (march 2016 rate)  Quantity volume of sales (QS) = Kgs sold from sample multiplied by (commodity farmers sampled divided by total farmers sampled multiplied by total number of farmers). To convert volumes sold to Metric tons divide by 1000  Recurrent cash inputs (IC) = Cost of inputs used multiplied by (commodity farmers sampled divided by total farmers sampled multiplied by total number of farmers). To convert sales to USD multiply by 3410 (march 2016 rate)  Units of production (UP) = land or acres from sampled farmers multiplied (commodity farmers sampled divided by total farmers sampled multiplied by total number of farmers). To convert units of pdn or acres to hectares divide by 2.5  Calculate Gross margin for each Commodity  Calculate gross margin for males for each commodity  Calculate gross margin for females for each commodity  Coffee – Gross margin  Coffee male – Gross margin  Coffee female – Gross margin  Maize – Gross margin  Maize male – Gross margin  Maize female – Gross margin  Beans – Gross margin  Beans male – Gross margin  Beans female – Gross margin |
|  | Value of incremental sales (collected at farm- level) attributed to FTF implementation | VS = Value of sales calculated above for all the three crops  Formula = Yr3 VS – Yr 1 VS |
|  | Number of farmers and others who have applied new technologies or management practices as a result of U.S. government assistance | Technologies used   1. Sum of farmers that answered the following   Coffee techs = Qtn 7 (2), Qtn 16 (2,3, or 4), Qtn 23 (3,4,5), Qtn 35 (4,5).  Maize techs = Qtn 6 (1,2,4,5,6) Qtn 7 (2,3), Qtn 13 (1,2,3) Qtn 15 (2,3, or 4), Qtn 22 (2,3,4) Qtn 34 (3), Qtn 35 (4,5,6)  Beans techs = Qtn 5 (2,3,5,6,7), Qtn 6 (2), Qtn 12( 1,2,3), Qtn 14 (2,3,4), Qtn 21 (2,3,4,5), Qtn 32 (2,3,4), Qtn 33(3), Qtn 34 (4,5)  General questions no.4   1. Sum of farmers that answered yes to any of the above.   To extrapolate = total number farmers sampled that used techs (count once regardless of how many used divided by total number of sample and multiply by total number of farmers reached (total of form 7 farmers)  **Repeat for all the three commodities.**   1. Farmers by technology type; (Sum up farmers per technology for each crop)   Crop genetics – improved seed  Cultural practices – planted in lines or using ropes  Pest management – used pesticides  Disease management – used fungicides/herbicides  Climate mitigation – answers in General questions no.4  Post-harvest – handling and storage – silos, pic bags  Other – used machinery for land opening |
|  | Number of hectares under improved technologies or management practices as a result of U.S. government assistance | 1. Sum of farmers land (acres) that used under of the above technologies.   Maize = Qtn 4 if answered yes to 6 (1,4, 2,5), Qtn 12, 21, 28,  Beans = Qtn 3 if yes to 5 (2,3,5,6) Qtn 11, 20, 27,  Coffee = Qtn 12, Qtn 4, if answered yes to Qtn 16 (2,3,4), or Qtn 22, Qtn 29,   1. Calculate Sum of hectares by sex. Total to be used when extrapolating for the different techs under each crop. 2. Land size for each technology   Crop genetics – improved seed  Cultural practices – planted in lines  Pest management – used pesticides  Disease management – used fungicides/herbicides  Climate mitigation –  Post-harvest – handling and storage – silos, pic bags  Other – used machinery for land opening  **Compute for each commodity**   1. Land size by sex   Male  Female   1. To extrapolate for each crop and it techs used = convert acres for each technology under each commodity to hectares (divide by 2.5). Divide sampled hectares by total hectares for the three crops and multiply by total hectares under techs. |
|  | Percentage of farmers acknowledging positive benefits from the accessed inputs | 1. Total of Farmers used inputs,     Coffee  Total of farmers answered to Qtn 9, 18, 25  Male  Female  Maize  Total of farmers answered to Qtn 9, 17, 24,  Male  Female  Beans  Total of farmers answered to Qtn 8, 16, 23  Male  Female   1. For each commodity   Number of farmers that provided answers to the above divided by total farmers sampled and multiply total number of farmers that used inputs (indicator 3) |
|  | Percentage of farmers purchasing inputs from village agents and other promoted models | 1. Sum of farmers that purchased inputs under each commodity from the different sources   Maize (Qtn 10), Beans (Qtn 9), Coffee (Qtn 10)from the following sources;  Stockist through VARM  Village agents  Stockist  Bought in the market/shop  Got from another farmers  Direct from manufacturer  Container village in Kampala   1. Sample of farmers that used inputs divide by the total sample and multiply by the number of farmers that used inputs (indicator number 3) |
|  | Value of Agricultural and Rural Loans | 1. Sum of figure under General questions Qtn 2   Total loans by females sampled plus total loans by males.     1. To get value of loans. Number of sampled farmers divided by total of all sampled farmers and multiply by total number of farmers in form 7. 2. To extrapolate = total number of sampled farmers that got a loan divide by total sample of the 3 commodities. Multiply by answer in b) above. Divide sum by USD @ 3410 (march rate) |
|  | Reduction in post-harvest losses by activity-assisted smallholders | 1. Divide total production lost by Total production for the three commodities   Total production lost – Maize qtn 42, Bean Qtn 41, Coffee Qtn 42.  Subtract total lost from Yr 1 to get reduction in losses |
|  | Number of stakeholders implementing risk-reducing practices/actions to improve resilience to climate change as a result of USG assistance | 1. Sum of farmers answered yes to Qtn 4 under general questions. |