**APENDICES**

Appendix 1 Interview Schedule

**General Instructions to Enumerators**

* Make brief introduction to each farmer before starting the interview, get introduced to the farmers, (greet them in the local way) get her name; tell them yours, the institution you are working for, and make clear the purpose and objective of the study.
* Please ask each question clearly and patiently until the farmer understands (gets your point).
* Please fill up the questionnaire according to the farmers reply (do not put your own opinion).
* Please do not try to use technical terms while discussing with farmer and do not forget to record the local unit.
* During the process put the answer of each respondent both on the space provided and encircle in the choose

 Identification number (code) ------------------

Kebelle name -----------------------------------

Name of enumerator-----------------------------

Date of interview---------------------------------

**Section 1: Individual Background**

1.1 Name of borrower\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1.2 Gender\_\_\_\_\_\_ 1.3 Age\_\_\_\_\_\_ 1.4 Education level

 0= illiterate 1= literate 1.5 Occupation \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1.6 Marital status a. Single b. Married c. Divorced d. Widowed

1.7 What is the size of your family? \_\_\_\_\_\_\_\_\_\_\_Males \_\_\_\_\_\_\_\_Females

1.8 a. How many people in your HH are below 10 years \_\_\_\_\_\_\_

 b. Disabled members and elders above 63 years\_\_\_\_\_\_\_

3.

**Section 2: Economic Data**

2.1 What is your annual daily income in this production year (in ETB)? \_\_\_\_\_\_\_\_\_\_

2.1 Do you own any of the following? (Put down numbers).

 Cattle\_\_\_\_\_\_\_\_\_\_ Shoat \_\_\_\_\_\_\_\_\_\_\_\_ mule\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 Enterprise of any type\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Others (State) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

2.3 a. How much total farm size do you have in the year 2010/2011? \_\_\_\_\_\_\_\_\_\_\_ ‘*timad*’

 b. Land allocated for crop production \_\_\_\_\_\_\_\_\_\_‘*timad*’ grazing \_\_\_\_\_\_’ *timad’;* Fallow \_\_\_\_\_’*timad*’;

 If others (specify) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_*timad*

2.4 Fertility status and soil character of the plots as perceived by the borrower 1= good 0= bad

2.5 a. Do you feel that your holding is adequate to satisfy your family needs? 1= yes 0= no

 b. If no, which of the under listed activities did you perform to raise your income?

 i. Petty trading ii. selling labor iii. selling fire woods and charcoals

 iv. If others (specify) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

2.6 What was your annual income at this year (2010/2011).

|  |  |
| --- | --- |
|  |  Amount  |
|  |  |
| Annual gross farm income (in ETB) |  |
| Annual gross off-farm income (in ETB) |  |
|  |  |

2.7 a. Did you experience any food gap before entering into the project and over the subsequent years?

 b. If yes, Year of food gap \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. c. Number of months\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 d. What do you think is for food gap?\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

2.8 a. What are the major areas of your investment to generate income from World Bank Food Security Project (WBFSP) credit? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 b. Is there any improvement in the accumulation of physical assets after entry of the Project?
 c. If yes, specify the accumulated assets over the subsequent years?

|  |
| --- |
| Year |
|   |
| \_\_\_\_\_\_\_\_\_\_ | \_\_\_\_\_\_\_\_\_\_ | \_\_\_\_\_\_\_\_ | \_\_\_\_\_\_\_\_\_\_\_ | \_\_\_\_\_\_\_\_ |
|  |  |  |  |  |
| Accumulation of Physical Assets | Yes/No | Yes/No | Yes/No | Yes/No |
| Specify the assets | \_\_\_\_\_\_\_\_\_\_ | \_\_\_\_\_\_\_\_ | \_\_\_\_\_\_\_\_\_\_\_ | \_\_\_\_\_\_\_\_ |

2.9 Is natural hazard the reason that you didn’t pay still? 1=yes 0=No

2.10 Are socio-economic factors or institutional factors that affect you to pay your loan timely?

 0=socio-economic 1= institutional

**Section: 3** **Institutional and Social Factors**

3.1 Are you a member of any social groups (Iquip, Idir, Cooperatives, etc) after entry into this

 project? 1=Yes 0=No

 b. If yes, specify the social groups: 1.\_\_\_\_\_\_\_\_\_\_\_ 2. \_\_\_\_\_\_\_\_\_\_\_\_ 3.\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 3.2 How much amount of money does you saved during this production year starting from the

 entry of the project? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

3.3 a. Perceived condition of the prevailing output price and market Service

 1= fair 0=bad

 b) Distance from market (hours) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

3.4 a. Did you celebrated social ceremonies in 20010/2011 fiscal year?

 i. wedding ii. funeral ceremonies

 iii. engagement iv. circumcision v. Idir/Iqub vi. others (specify) \_\_\_\_\_\_\_\_\_\_

 b. What were you prepared for these ceremonies and how much do you estimate to have

 invested on it? \_\_\_\_\_\_\_\_\_

 3.5 a. Have you gone to a health center for treatment? 1=Yes 0= No

 b. If yes, how much did you pay? \_\_\_\_\_\_\_\_\_\_

 c. The source of the money you paid \_\_\_\_\_\_\_\_\_\_\_\_

 d. Distance to get health center\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 3.6 a. What is your opinion about the project’s planning, implementation, monitoring and evaluation of the project by KDC, WFT, and WDC? 1= good or fair 0= weak

 b. What kind of assistance did you get by KDC regarding the loan you took? \_\_\_\_\_\_\_\_\_\_\_\_

 How many days per year?\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 c. What kind of assistance did you get by WFT regarding the loan you took? \_\_\_\_\_\_\_\_\_\_\_\_\_

How many days per year?\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 d. What kind of assistance did you get by WDC regarding the loan you

took?\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

How many days per year?\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

3.7 How many days per quarter are contacting with RUSACCO? \_\_\_\_\_\_\_\_\_\_

3.8 a. Are you aware of the revolving fund? 1=Yes 0= No

 b.If yes, How many times have been revolving the loan in your Kebelle?\_\_\_\_\_\_\_\_\_\_

3.9 How much amount did you receive from this project as a loan? \_\_\_\_\_\_\_\_\_\_ETB and the year of receiving the loan\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 b. Why did you borrow the loan?

 0= consumption 1= on-farm inputs and consumption

 c. Was credit received adequate and timelines? 1= Yes 0= No

 d. Are you repaying your loan? 1= Yes 0= No

 e. If yes, (fill the table below)

|  |  |  |  |
| --- | --- | --- | --- |
|  | Repayment year\_\_\_\_\_\_\_\_\_ | \_\_\_\_\_\_\_\_\_\_ | \_\_\_\_\_\_\_\_\_\_\_ |
| Amount of repayment per year (in ETB) | \_\_\_\_\_\_\_\_ | \_\_\_\_\_\_\_\_\_\_ | \_\_\_\_\_\_\_\_\_\_\_ |

 f. If No, why? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 g. Distance from your credit source (hrs) \_\_\_\_\_\_\_\_\_\_\_\_

3.10 a. What was the interest rate while you borrowed the loan from the project?\_\_\_\_\_\_\_\_\_

 b. Who set this interest rate?\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 3.11 a. Is there an improvement in the access to health services after entering into the project?

1=Yes 0= No

 b. What are the improvements? i\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ ii.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 iii.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ iv \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

3.12 a. Is there an improvement in the household ability in sending your children to school?

 0= No 1= Yes
 b. If yes, what are the improvements? i. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. ii. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

3.13 a. Have you attended any skill development training under this project?

 1=Yes 0=No

 b. If yes, specify the trainings: i\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ ii.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 iii.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ iv \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 c. If yes, what are the improvements? i\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ ii.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 iii.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ iv \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

3.14. Did you borrow the loan for off-farm inputs or others? 0= off-farm inputs 1= others

3.15. What was the effect of group formation on your repayment performance?

 1 = good 0 = bad

 3.16 a. What do you think is the main reason that borrowers of WBFSP do not pay their matured loan timely (in your Kebelle)

 0= Socio-economic factors 1=Institutional factors

 b. Can you mention other factors? i\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ ii.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 3.17 Can you sustain the present improvement without any further grants (loan)? Fill the table below.

|  |  |
| --- | --- |
| Sustain |  How (why)? |
| Can sustain |  |
| Cannot sustain |  |

3.18 Can you describe any activity of the project that turned your life (as a case)?

 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

3.19 a. Did you get credit from WBFSP during 2010/2011? 1= yes 0= no

 b. If yes, who did provide you? i. Government ii. Your relative iii Aid from abroad

 iv. KDC v. RUSACCO vi. others (specify) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

3.20 a. Who selected you as a beneficiary of the project in the year 2007? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 b. What was the selection method?\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

3.21 Who have more responsibility to make decision on the credit taken?

 a. husband b. wife c. both

3.22 What major factors did you consider very essential next to consumption which was preferred to loan repayment? (Rank in order of importance).

 a. housing \_\_\_\_\_\_\_ b. clothing\_\_\_\_\_\_\_ c. school fee \_\_\_\_\_\_\_\_\_\_\_\_\_

 d. medical expenses e. others (specify) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

3.23 a. At what time did you pay back your debt? \_\_\_\_\_\_

 b. If not repaid on the due date, what actions did the lending institution take on

you?\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

c. Did you know the end of grace period/matured loan? 1= yes 0= no

 d. If yes, why you become late? \_\_\_\_\_\_\_\_\_\_\_\_

3.24 What was the effect of group formation on your repayment performance?

 1= good 0=bad

3.25 What was your opinion on the general procedure of loan acquisition and repayment conditions? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

3.26 Do you suggest any recommendations for the project?

 1.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 2\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 3.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

3.27 What was your opinion on your area’s loan acquisition and repayment conditions?

 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (To be answered by the enumerator)

**Appendix 3 Estimated Number of livestock in number and TLU equivalent**

|  |  |  |  |
| --- | --- | --- | --- |
| SerialNumber. | Livestock | Population | Percent |
| Number | TLU |
| 1 | Cattle | 56,806 | 39,764.20 | 61.4 |
| 2 | Sheep and goat | 189,213 | 18,921.30 | 29.2 |
| 3 | Equine | 13,096 | 6132.50 | 9.5 |
|  | Total | 259,115 | 64,818 |  |

Source: (CSA, 1999)

**Appendix 4 Random Number tables for the selected of five rural *kebelles* and 120 borrowers**

To use random number table in selecting 5 rural *Kebelles*using ENA for SMART Software ranged 1 to 18, Number: 5

17 16 11 13 3

|  |  |  |
| --- | --- | --- |
| Geographical unit(Name of *Kebelles*) | Population size(Number of borrowers in the year 2007) | Assigned random table (*Kebelles* selected randomly) |
| 2 (Emegwa) | 20 |  |
| 3 (Gurmign) | 15 |  |
| **4 (Zeram)** | **40**  | **1** |
| 5 (Ago) | 20 |  |
| 6 (Dasa) | 79 |  |
| 7(Angewa) | 24 |  |
| 8 (Kewaryat) | 20 |  |
| 9 (Astoya) | 20 |  |
| 10 (Wemso) | 20 |  |
| 11 (Ayatmeda) | 32 |  |
| **12 (Bash)** | **25**  | **2** |
| 13 (Agemsa) | 56 |  |
| **14 (Tarma)** | **20**  | **3** |
| 16 (Tachigem) | 20 |  |
| 23 (Kolomargefya) | 20 |  |
| **24 (Chachinaysata)** | **20** |  **4** |
| **25 (Dengeze)** | **54** |  **5** |
| 26 (Mayagot) | 20 |  |
|  |  |  |

The number of population size (borrowers) in the above 5 randomly selected rural Kebelles is:

40 +25 + 20 + 20 + 54 = 159

From the1180 borrowers 120 were selected randomly as follows.

**From Zeram Kebelle (Z)**

159 = 120

40=Z Z= 120\*40/159= 30.19 =30

**Similarly, from Bash Kebelle (B) From Tarma Kebelle (T)**

159 = 120 159 = 120

25 = B B= 120\*25/159= 18.87 =19 20 = T T= 120\*20/159= 15.09 =15

**From Chachinaysata Kebelle (C) From Dengeze Kebelle (D)**

159 = 120 159 = 120

 20 = C 54 = D D= 120\*54/159=

 C= 120\*20/159= 15.09 = 15 D=41

Z + B+ T + C + D = 30 + 19 + 15 + 15 + 41 = 120

**Similarly, using random number table for borrowers:**

**Random Number table for Z**

Range: 1 to 40, Number: 30

25 32 11 14 40 34 4 10 12 37 33 17 8 35 6 28 23 13 9 21 3 31 26 2 29 18 39 16 38 24

**Random Number table for B**

Range: 1 to 25, Number: 19

12 8 9 17 6 22 11 4 20 13 3 14 16 23 5 18 1 10 21

**Random Number table for T**

Range: 1 to 20, Number: 15

5 16 12 19 13 8 11 2 4 17 20 14 6 15 10

**Random Number table for C**

Range: 1 to 20, Number: 15

6 15 20 10 1 2 19 7 12 8 14 4 18 13 3

**Random Number table for D**

Range: 1 to 54, Number: 41

41 25 32 43 48 51 4 45 16 40 3 1 46 23 8 42 21 36 7 13 44 6 30 26 9 15 33 47 14 35 10 39 38 50 12 49 2 22 19 52 11

After writing serial numbers infront of each borrowers of the year 2007 in their respective *Kebelles*, the above numbers given to the borrowers were selected.

**Appendix 5 The MLR Model Summary**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Mode  | R | R Square | Adjusted R Square | Std. Error of the Estimate | Change Statistics |
| R Square Change |  F Change | df1 | df2 | Sig. F Change |
|  |  |  |  |  |  |  |  |  |  |
| 1 | .907 | .822 | .788 | 315.14376 | .822 | 24.343 | 19 | 100 | .000 |

a Predictors: (Constant), Training given to beneficiaries, Dependency ratio , Gender of the borrowers, Adequacy of loan from the project , Amount of saving in ETB, Amount of loan borrowed from the project in ETB, Age of borrowers in years, Variation of interest rate (existence of high interest rate), Celebrate social ceremonies, Health care expenditure , Sending children to school, Annual gross off- farm income in ETB, Educational level of the borrower, Main reason you think for not repaying matured loan timely in your Kebelle, purpose of borrowing, Planning, implementing, monitoring and evaluating end users by KDC, WFT, WDC, Total livestock owned in livestock unit , Farm size in hectares , Annual gross on- farm income in ETB.

b. Dependent Variable: Repaid amount of loan by the corresponding respondents of World Bank Food Security Project beneficiaries in ETB

**Appendix 6 ANOVA Table**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Mode |   | Sum of Squares | df | Mean Square | F | Sig. |
| 1 | Regression | 45935225.007 | 19 | 2417643.421 | 24.343 | .000(a) |
|   | Residual | 9931558.649 | 100 | 99315.586 |   |   |
|   | Total | 55866783.656 | 119 |   |   |   |

a Predictors: (Constant), Training given to beneficiaries, Dependency ratio , Gender of the borrowers, Adequacy of loan from the project , Amount of saving in ETB, Amount of loan borrowed from the project in ETB, Age of borrowers in years, Variation of interest rate (existence of high interest rate), Celebrate social ceremonies, Health care expenditure , Sending children to school, Annual gross off- farm income in ETB, Educational level of the borrower, Main reason you think for not repaying matured loan timely in your Kebelle, purpose of borrowing, Planning, implementing, monitoring and evaluating end users by KDC, WFT, WDC, Total livestock owned in livestock unit , Farm size in hectares , Annual gross on- farm income in ETB

b Dependent Variable: Repaid amount of loan by the corresponding respondents of World Bank Food Security Project beneficiaries in ETB

**Appendix 7 Excluded Variables**

|  |  |  |  |
| --- | --- | --- | --- |
| Variables | Coefficients |  t |  Sig. |
|  B |  Std. Error |
| (Constant) | 88.096 | 364.161 | .242 | .809 |
|  |  |  |  |  |
| CHLDSCOL-X5 | -38.494 | 75.109 | -.513 | .609 |
| REASON-X6 | -82.914 | 74.208 | -1.117 | .267 |
| ONFARM-X9 | .024 | .022 | 1.106 | .272 |
| OFFARM10 | -.006 | .031 | -.205 | .838 |
| TLU-X12 | -32.977 | 32.877 | -1.003 | .318 |
| ADQLOAN-X13 | 52.859 | 86.893 | .608 | .544 |
| AMUTLON-X15 | -.059 | .195 | -.303 | .762 |
| CERMONY-X16 | 97.396 | 74.934 | 1.300 | .197 |
| DEPRATIO-X17 | -1.884 | 2.310 | -.816 | .417 |
|  BORPURP-X18 | 125.260 | 77.247 | 1.622 | .108 |
| TRAING-X19 | 129.637 | 88.016 | 1.473 | .144 |

Predictors in the Model: (Constant),

X5 = Sending children to school (CHLDSCOL) dummy (1 if yes 0 otherwise)

X6 = Main reason you think for not repaying matured loan timely in your *Kebelle* (REASON) dummy (1 if yes 0 otherwise)

X9 =Annual gross on- farm income in Birr (ONFARM)

X10 = Annual gross off- farm income in Birr (OFFARM)

X12 = Total livestock owned in livestock unit (TLU)

X13 = Adequacy of loan from the project (ADQLOAN) dummy (1 if adequate 0 otherwise)

 X15 = Amount of loan borrowed from the project in Birr (AMUTLON)

X16 = Celebrate social ceremonies (CERMONY)

X17 = Dependency ratio (DEPRATIO)

X18 = Purpose of borrowing (BORWPURP)

X19 = Training given to beneficiaries (TRAING)