The development objective

Conservation of indigenous livestock for future generations and their increased contribution to livelihoods through enhanced use

Immediate objective

To develop and to make available effective tools to support decision making:

- for the conservation and
- sustainable use of indigenous FAnGR and their wild relatives
Decision Support Tools (DSTs)

1. Breeding manuals
2. Breeds diversity index
3. Molecular and phenotypic characterization tools
4. Risk assessment tool for conservation
5. Framework for analysis of policy options
6. Framework for analysis of market options
7. Cost benefit analysis breeding programs
8. Recording systems
9. Database and knowledge center for the project
10. Training modules and manuals

(Surveys on AnGR; Phenotypic characterization; Genetic characterization; Breeding programs; Policy analysis; Market analysis; Management protocols)

Outcome 1: Enhanced conservation and management of FAnGR diversity using Decision Support Tools (DSTs)

Output 1.1. Appropriate breeding tools for low input productions systems including ONBS are developed and evaluated
Output 1.2. A tool for cost-benefit analysis of breeding programmes incorporating market and non-market values of FAnGR evaluated and made available
Output 1.3. Analytical frameworks for assessment of policy and marketing options (existing and alternatives) for FAnGR developed, evaluated and made available
Output 1.4. Tools for diversity assessment and for setting cost effective conservation priorities developed and made available

Outcome 2: Increased capacity and enhanced knowledge to use decision support tools for conservation of livestock diversity at national and global levels

Output 2.1. Capacity of stakeholders to apply the developed Decision Support Tools for conservation and sustainable management/ use of FAnGR and their wild relatives enhanced
Output 2.2. Knowledge and understanding of value of FAnGR and wild relative increased and replication strategies made available

Progress (1st 6 months)

Jan 20  Signing of Project Agreement
Jan 21-23 Project sites survey and selection
Jan 24  Launching seminar
Feb 14-19 Training workshop for HH, MA surveys & PRAs
March 1-31 Conduct of HH, MA Surveys and PRAs
April-May Data on HH and MA surveys completed
June-July Characterization & In-depth monitoring
                      Blood Sampling of Goats and Chicken
January 20, 2011

Project sites
- Site II Faisalabad
- Site I Bahawalpur
- Afghanistan
- China
- Iran
- India
- Pakistan

Household survey manual
### Progress (1st 6 months)

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### Training Manuals

1. PRA checklist and training manual
2. HH survey Questionnaire and training Manual & Data Base
3. Market Agent Questionnaire and Training Manual & Data Base
4. Phenotypic and Genetic characterization and longitudinal survey questionnaire and training manual & Data Base
**Welcome to FAnGR Pakistan**

Livestock is the mainstay of the socio-economic life of the people in Pakistan. It is the largest contributor of agricultural income, providing about 25% of the agricultural value added and earning 3% of exports. Indigenous breeds and variety are with the same characteristics as our forefathers. The project’s immediate objective is to develop and make available effective decision support tools to assist stakeholders in decisions involving the sustainable use of genetic diversity in indigenous livestock. The ANAIR-GRI are providing funds for conducting and compiling work to generate livestock intelligence inventories. Project is being run in four case situations, including Pakistan, Philippines, Vietnam, and Egypt. Government, Livestock and Veterinary Institute (GLV) is the executing agency of the project and is responsible for its execution in Pakistan.

**Blood Sampling Procedure and In-Depth Monitoring Survey Manual for Indigenous Chickens and Goats**

**FTA cards for blood sampling of chicken**

**DNA extraction**

**FTA DNA purification protocol**

1. **Sample application**
   - Apply specimen and allow to dry completely.

2. **Disk removal**
   - Punch a disk out of the sample area on the FTA Card.

3. **FTA purification reagent washes**
   - Place the disk in PCR tube and wash three times with FTA Purification Reagent.
   - Discard used reagent after each wash.

4. **TE-1 rinse**
   - Wash twice with TE-1 buffer (10 mM Tris, pH 8.0) and discard used buffer after each wash.

5. **Drying step**
   - Dry disk in PCR tube.

6. **Direct to PCR**
   - Add PCR master mix directly to the disk and amplify.
1. Comb types

1=Single
2=Pea
3=Withered
4=Rose
5=Y-shaped
6=Shawl
7=Butterring
8=Necklace

ANNEX 1: CHICKEN

5. INDIVIDUAL CHICKEN RECORD CARD

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<th>COUNTRY CODE</th>
<th>BRED CODE</th>
<th>INDIVIDUAL ID</th>
<th>BRED CODE</th>
<th>DATE HATCHED</th>
<th>INDIVIDUAL BIRDS &amp; BREED CODE</th>
<th>INDIVIDUAL BIRDS &amp; BREED CODE</th>
<th>INDIVIDUAL BIRDS &amp; BREED CODE</th>
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Program

May 25, 2011 09-11 AM  Inaugural Session
12-14 PM  Technical Session I Phenotypic Characterization and Blood Sampling
15-17 PM  Technical Session II In-depth Monitoring

May 26, 2011  All day  Field visit for Phenotypic characterization, Blood sampling and In-depth monitoring

May 27, 2011  09-12 AM  Wrap-up session with Trainees

Thank You