

REPORT
ON
PREPARATION OF ESTIMATES
OF
**AGRICULTURAL CREDIT
REQUIREMENTS**

2006



STATE BANK OF PAKISTAN

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1. Background

The first report on Methodology for the preparation of the estimates of agricultural credit requirements was devised in 1974. It was subsequently revised in 1979, 1983, 1989 and 2001. Since the last revision of 2001 the economy has undergone robust economic changes particularly in the agriculture sector. It deemed necessary to examine the entire Methodology in the light of the changes in agriculture and rural finance. The Chairman, Agricultural Credit Advisory Committee (Governor, State Bank of Pakistan) in the annual meeting held in July, 2005 constituted a Committee of Experts to revise the Methodology under the Chairmanship of Mr. Riaz Riazuddin, Economic Adviser, State Bank of Pakistan.

2. Objective

The methodology report is a useful document to estimate agriculture credit requirements in the country. It gives a standard and uniform criteria to prepare the agriculture credit estimates both country-wide and province / region wise. It is also aimed at facilitating banks in estimating agricultural credit demands in their respective target areas / markets.

Further, it provides list of eligible items under agriculture credits to assess the level and volume of credit towards the sector.

Lastly, the per acre credit limits for banks recently notified by SBP, has been made part of the report to provide all information / criteria for credit need assessment in one document.

3. Scope and methodology

The report give estimates of per acre inputs viz seeds, fertilizers, pesticides etc. for various crops, the seed quantity normally available to the farmer indigenously and the seed quality which is required to be purchased for different crops and farm size. The estimates of fertilizer and pesticide are however based on Annual Development Plans of provincial governments which includes estimated use of fertilizer and pesticides during a particular year. The committee tried to collect detailed data on fertilizer and pesticide, like that on seeds, however data received from a few stakeholders was not reliable and representative enough to be used in and made part of the report. The committee therefore, continued with the previous report methodology for estimating the use of fertilizer and pesticides in the country during particular year.

To prepare this report the committee made detailed review of the last report, collected data from Agricultural Research institutes and universities, reviewed the changes in inputs requirements over the previous year and adopted proposals which are most representative and could be used / applied across the country to assess the input and credit requirements throughout the country.

Major feedback and proposals that have been incorporated in this report were received from: -

- a. Federal and Provincial Governments
- b. Banks
- c. Agriculture universities (Faisalabad, NWFP, and Tandojam)
- d. Chambers of agriculture
- e. Per acre crop wise credit limits fixed for banks in terms of ACD Circular (Para 9)

4. Changes from previous reports.

The report include following additions / improvements / changes over the previous reports.

- 1) For computing seed rate per acre, one acre has been considered as equivalent to eight (8) canals
- 2) Cost components like seeds, fertilizer and pesticides have been revised.
- 3) Total cash and credit requirements for Seeds, Fertilizers and Pesticides for small, medium and large farms have been revised to 100%, 70% and 50% respectively from 95%, 60% and 40% respectively in the earlier report.
- 4) Per acre credit limit for various crops notified recently by SBP has been made part of the report.
- 5) A number of new items have been included in the list of eligible items for agriculture financing including the matured orchards and forests.

4.1. Seeds

4.1.1 Seeds requirement per acre

The revised seed requirement rates per acre (Kg) adopted by the Committee for various crops are as per Table 1.

Table 1: Seed Requirement Rates**(Kg per acre)**

Sr. No.	Crops	Existing	Revised
1.	Rice		
	Basmati	8	9
	Other scented varieties (Sugdasi)	12	12
	Irri	12	13
2.	Wheat		
	Irrigated	50	55
	Rainfed (Barani)	55	61
3.	Cotton		
	Delinted	12	12
	Linted	12	12
4.	Maize		
	Hybrid	10	11
	Improved variety	16	16
5.	Sugarcane	3,200	3,600
6.	Sugarbeet	2.5	3
7.	Potato	1000	1100
8.	Vegetable (Overall)	5-12	9
9.	Onion (Seedling)	3	4
10.	Ladyfinger	12	12
11.	Peas (Mutter)	10-15	10-15
12.	Sunflower	2-5	4
13.	Canola	2	2
14.	Sovabean	25	27
15.	Oil seed (Overall)	3	3
16.	Rapeseed and Mustard	2	2
17.	Linseed	5	5
18.	Coarse grain (Overall)	400 *	500 *
19.	Millet (Baira)	10	10
20.	Gram	20-25	23
21.	Sorghum (Jowar)	8-12	11
22.	Moong	8-10	9
23.	Masoor	8-10	9
24.	Lentil	8-10	9
25.	Groundnut	35-40	40
26.	Tobacco`	1,000 *	1,100 *

* Figures are in Rupees terms.

Note: One Acre may be treated equivalent to eight canals.

4.1.2 Percentage area for which seed is required to be purchased

The percentage acreage for purchase of seed requirement have been revised for some of the crops and kept the existing percentages for the remaining crops as per Table 2.

Table 2: Percentage Acreage for purchase of seed required**(%)**

Sr. No.	Crops	Existing	Revi-sed
1.	Rice	50	60
2.	Wheat	50	50
3.	Sugarcane	45	50
4.	Vegetable	85	85
5.	Pulses	85	85
6.	Oilseed (Overall)	75	80
7.	Sunflower (Improved)	100	100
8.	Oilseed (Canola)	100	100
9.	Oilseed (Traditional)	30	40
10.	Coarse grain (Baira, Jowar, Gram, Barley)	60	65
11.	Cotton	100	100
12.	Patato	100	100
13.	Maize (Overall)	100	100
14.	Maize (Hybrid)	100	100
15.	Maize (Improved Variety)	100	100
16.	Orchards and Nurseries	100	100
17.	Groundnut	80	80
18.	Tobacco	60	70

Note: Crop acreage is taken as the basis for calculating requirements of seeds. Applying current prices or Government fixed prices as the case may be arrives at cash requirements.

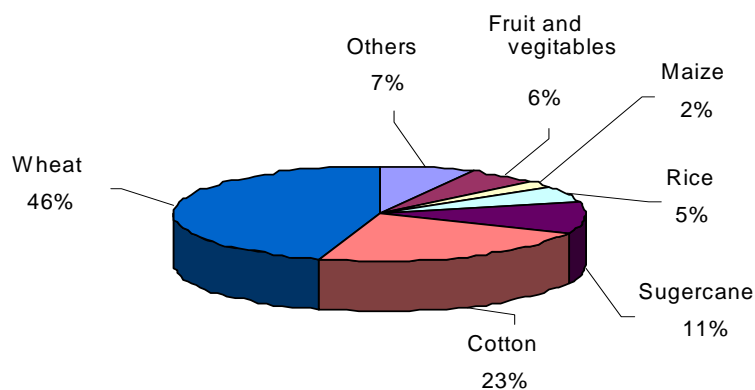
4.2. Fertilizers and pesticides

The use of fertilizers and pesticides depends on various factors that are more subjective like paying capacity of the farmer, selection of pesticides, awareness, uncertainty for rain-fed farms and proper irrigation.

The methodology for estimation of fertilizers and pesticides use, fixed under Annual Development Plan for various provinces is taken as basis. The officially fixed prices are applied for calculating total cash requirements.

According to a survey conducted by Food and Agriculture Organization of UN (www.fao.org/docrep/007/y5460e/y5460e05.htm) the farmers consumed three tons of fertilizers and pesticides in the year 2004. The survey explains that in Pakistan most fertilizers are used on irrigated crops and in rain-fed areas their use is still very low. The crop wise percentage consumption as per the survey is illustrated in Figure 1.

**Figure 1: Crop-wise Use of Fertilizers
in Pakistan in 2004
(Survey By FAO of UN)**



Source: Fertilizer use by Crop in Pakistan by FAO-2004.

4.3. Farm size

Percentage breakdown of different farm sizes for various provinces are to be applied as under:

Table 3: Province-wise Farm Size

Sr. No.	Name of Province	Small Farm	Percentage Area	Medium Farm	Percentage Area	Large Farm	Percentage Area
1.	Punjab	Upto 12.5 acres	49	Above 12.5 acres to 50 acres	38	Above 50 acres	13
2.	NWFP	-do-	67	-do-	22	-do-	11
3.	Sindh	Upto 16 acres	52	Above 16 acres to 64 acres	31	Above 64 acres	17
4.	Baluchistan	Upto 32 acres	54	Above 32 acres to 64 acres	17	-do-	30

Source: Pakistan Agricultural Census-2000, Government of Pakistan, Statistics Division, Agricultural Census Organization.

5. Credit estimation methodology

Farmers are in need of credit in the areas of production and development. Development credits mainly consist of construction of cold storage, silos, and mechanization equipment like tractors, tube well, threshers, etc. Whereas the production credit is used in the purchase of crop inputs like seeds, fertilizers, pesticides, water charges, fuel for mechanize farming, etc.

The credit requirement for the development credits varies with the type of machinery, level of project and the borrower. However, agriculture credit requirement for production purposes depends on the size of the farm as the inputs can be measured on per acre basis.

The farmers have to meet the minimum requirement of the seeds per acre; however the use of fertilizers pesticides depends on the paying capacities of the farmers. As such we have covered the seeds per acre requirements for each crop that will facilitate the farmers and banks to access the seed requirements for respective crop.

6. New eligible items

Since the release of last Report in 2001 the farmers demands have increased manifold. To facilitate the farmers and banks an indicative list of eligible items has been extended to bring it in line with the existing and future needs of agriculture sector. The newly incorporated items classified under farm (crop), non-farm (non-crop) for short term and medium and long term are as under. The complete list is attached at Appendix – A

6.1. Farm (crop) credit – short-term

Following items have been added in the list of eligible items for farm (crop) credit – short-term.

1. Charges for Laser Leveling.
2. Labor charges for Sugarcane stripping.
3. Labor charges for Cotton picking.
4. Labor charges for Rice sowing / Transplantation of nursery.
5. Cost of contamination free cloth for Cotton picking.

6. Production Loans for off-season vegetables growing in green houses and tunnels (under controlled environment farming system).
7. Loan for Herbs / Roots Production on Commercial Basis.
8. Transplantation Expenses
 - a) Inter culturing expense.
 - b) Farm Yard Manure.
9. Production loan for commercially viable medicinal crops
10. Purchase of packaging material for horticulture and floriculture.
11. Effective Microbes Technology (EMT)

6.2. Farm (crop) credit – medium & long term

The addition of eligible items under this category is: -

1. Purchase of agricultural land for marginal farmers / tenants (land Acquisition Loans).
2. Financing for replacement of Tractors tyre.
3. Financing for the purchase of Ridgers cum Bed Shaper, Laser Leveler, Bulldozer for land leveling, Sunflower Harvester, Bed Sowing Drills for wheat, oats etc, Bed Planter for cotton, Maize, Sunflower etc., Mechanical Planters / Pneumatic Planters for Cotton, Maize, Sunflower etc., Potato Planter, Sugarcane Planter, Fertilizer Spreader, High Capacity Paddy Thresher, Sunflower & Soyabean Thresher, Groundnut Thresher, Wheat Straw Chopper-cum-Blower, Flail Mover, Stubble Shaver, Self Propelled Reaper for harvesting wheat and rice crops, Fertilizer Spreader for broadcasting chemical fertilizers evenly / uniformly.
4. Purchase of local / desi implements viz.
 - a) Yoke
 - b) Wooden / Iron Plough
 - c) Chlod Crusher.
 - d) Wooden Leveler.
 - e) Any other locally manufactured implements /stroke machine.

5. Cost of Construction/ Installation etc. of structures involved in Tunnel & Green House Technology for growth of Horticultural Produce.
6. Rotary Sprinkler / Water gun.
7. High Pressure Pump.
8. Straw / Dry Fodder Pressing Machine.
9. Wood Working Machinery.
10. Food Processing Plant.
11. Tomato Paste Making Units
12. Mini Juice Extraction Plants for citrus, mangoes and other fruits.
13. Hay Baler.
14. Kino / Mango / Fruit Polishing Machines / Waxing Machine.
15. Steel / Iron Tanks for Water supply / Storage at farm
16. Green House Equipment / Technology.
17. Tea Processing & Packaging Plant / Equipment.
18. Purchase of Mini Trucks by farmers.
19. Scientific Storage like system of Commodity Specific Cold chain
to be introduced from origin to destination.
20. Personal Computer for Agricultural purpose.
21. Packing & Weighing Machinery.

6.3. Non farm (non crop) credit – short term

6.3.1 Livestock

- 1) Packing material for meat, milk and other livestock products.
- 2) Working capital for milk collection center.

6.3.2 Poultry

- 1) Financing for transport / shipment of poultry products to urban markets.
- 2) Packing and storage material.

6.3.3 Fisheries (Inland)

- Packing and storage material.

6.3.4 Fisheries (Marine)

- 1) Processing and Canning Charges.
- 2) Fish Waste Disposal / Management Charges.

6.4. Non farm (non crop) credit – medium & long term

6.4.1 Livestock

1. Purchase of Male animals for breeding.
2. Purchase of Van for milkmen.
3. Chilling Vehicles/Storage Equipment to enhance life of Livestock Products.
4. Research base farming needs.
5. Construction of Building, Milk Chillers.
6. Quality Improvement.
7. Meat Processing Plants.
8. Purchase of Trucks for transportation of milk from field to market / Milk Plants.
9. Slaughter House Equipment.
10. Blood / Bones Processing Units.
11. Butter / Cheese Production Units.
12. Dairy Equipment and Animal Feed Plants.
13. Cheese Making Equipment / Machines.
14. Skimmed Milk Machinery and Abattoir

6.4.2 Poultry

1. Compound Feed Making Industry for Poultry.
2. Purchase of Poultry Feathering Machine.
3. Air conditioned Vans for marketing.
4. Purchase of Pickups / Trucks for transportation of eggs / chicken from farm to market.

6.4.3 Forestry

Tree plantation Including Bamboo / Sumbal/Pine tree/Diyar cultivation & Nurseries for growing plants including Ornamental / Decorative Plants.

6.4.4 Fisheries (Inland)

1. Excavators for Silt Cleaning & Digging of Ponds for Fish Farming etc.
2. Air-conditioned Vans for marketing.

6.4.5 Fisheries (Marine)

Cold Storage Facilities

7. Fixation of credit limits for matured orchards and nurseries

In the light of the ACD Circular Letter No. 2 / ACAC-04 / 2005 dated 27th October, 2005, committee adopted the per acre credit limit for matured orchards of different fruits are as under:

Table 4: Per Acre Credit Limit for Matured Orchard of Various Types of Fruits

(Rupees)

Sr. No.	Type of Fruit	Credit Limit
1.	Mango	30,000
2.	Citrus	25,000
3.	Apple	30,000
4.	Banana	25,000
5.	Jujuba	10,000
6.	Guava	15,000
7.	Coconut	15,000
8.	Litchi	25,000
9.	Palm	15,000

8. Per acre credit requirements for social forestry

In the light of suggestions received from the relevant institutions the committee recommended to adopt the per acre credit requirements for growing of various types of social forestry trees (only for matured trees)

Table 5: Credit Limits for Matured Social Forestry Trees

(Rs per acre)

Sr. No.	Items	Credit Limit
1.	Acasia	10,970
2.	Shesham	13,675
3.	Salmaha Malabarian and Eucalyptus	16,338
4.	Liner Plantation comprising-1000 trees	37,860
5.	Bamboo / Sumbal /Pine tree/Diyar etc.	15,195

9. Indicative per acre credit limits

It is imperative to mention that in compliance with the decision taken by the ACAC in its meeting held in July 2005, Agriculture Credit Department, SBP issued a circular in October 2005 wherein indicative per acre credit limits for major crops as well as for minor crops, including Orchards, were revised to meet the genuine credit needs of the farming community. These revised indicative credit limits are as given below:

Credit limits

(Rs per acre)

C r o p s	Credit Limits
A. Major Crops	
1. Sugarcane	18,000
2. Seed Cotton	11,000
3. Paddy	9,000
4. Wheat	8,000
B. Minor Crops	
1. Ginger / Potato / Turmeric / Tobacco	20,000
2. Onion	12,000
3. Chilly / Maize (Hybrid) / Sugar-beet / Tomato	10,000
4. Canola / Ground nut / Maize (Local) / Soya bean / Sunflower	8,000
5. Rapeseed / Mustard	7,000
6. Bajra (Millets) / Barley / Fodder crops (Barseem, Jantar, Multicuts etc.) / Garlic / Jawar (Sorghum) / Lentil (all types)	6,000
7. Fruit Crops (Melon, Watermelon & Muskmelon)	10,000
8. Other Crops	As per cost (minimum Rs. 6,000/-)
9. Floriculture:	
a) Nurseries for flowers / plants	25,000
b) Flowers	20,000
C. Mature Orchards	
1. Mango/ Apple	30,000
2. Almond /Apricots /Banana / Cherry / Citrus / Dates / Grape / Litchi / Peach / Plum Pomegranate	25,000
3. Cheekoo / Coconut / Guava / Loquat / Palm / Papaya / Pear	15,000
4. Other Mature Orchards	10,000

Appendix – A

**Agricultural Credit
List of Eligible Items**

A. Short-term Farm (crop) Credit

Production and development

- 1) Seeds
- 2) Water – Charges for purchase of tube-well
- 3) Fertilizers and gypsum
- 4) Pesticides including herbicides and Weedicides
- 5) Sprayers
- 6) Hired Farm Labour
- 7) Farm power (Hire)
- 8) Charges for Laser Leveling
- 9) Labor charges for Sugarcane stripping
- 10) Labor charges for Cotton picking
- 11) Labor charges for Rice sowing / Transplantation of nursery
- 12) Cost of contamination free cloth for Cotton picking
- 13) Charges for Purchase of diesel oil for tractor
- 14) Charges for purchase of diesel oil for tube-well operation
- 15) Fuel wood for curing of tobacco
- 16) Electric charges for tube-well operation
- 17) Orchards and Nurseries (including all dry fruits, dates and papaya)
- 18) Commercially important minor crops like fruits, vegetables, pulses, oilseeds, onions and flowers including production loan for minor crops like Mentha Arvensis, Asparagus etc. being food crops
- 19) Production loan for growth of Mushroom
- 20) Production Loans for off season vegetables grown in green houses and tunnels (under controlled environment farming system)
- 21) Herbs / Roots Production on Commercial Basis
- 22) Land Lease / Contract charges for Fodder cultivation
- 23) Transplantation Expenses
- 24) Inter Culturing Expenses
- 25) Farm Yard Manure
- 26) Production loan for commercially viable medicinal crops
- 27) Storage, Transportation, Marketing, Grading, Packing and Processing by farmers from field only
 - a) Storage Hire Charges
 - b) Transportation Hire Charges
 - c) Cost of Packing Material
 - d) Working Capital for Storage of Raw Agricultural/Farm produce

- 28) Purchase of packaging material for horticulture and floriculture
- 29) Effective Microbes Technology (EMT)
- 30) Construction of Laboratory for Integrated Pest Management (IPM)

B. Short-term Non Farm (non cop) Credit

i. Livestock (Goat, Sheep and Cattle)

- 1) Feeds, Raising and Veterinary Expenses
- 2) Artificial insemination unit services
- 3) Packing material for meat, milk and other livestock products
- 4) Working Capital for milk collection center

ii. Poultry

- 1) Purchase of chicks
- 2) Feeds and raising charges
- 3) Poultry medicines
- 4) Financing for transport / shipment of poultry products to urban markets
- 5) Packing and storage material

iii. Fisheries (Inland and marine excluding deep sea fishing)

a) Inland

- 1) Fish seed
- 2) Fish Feed
- 3) Manuring
- 4) Running charges of tube-wells / pumping sets
- 5) Curing and drying by fishermen
- 6) Packing and storage material

b) Marine

- 1) Fuel, ration and ice for marine Fishes
- 2) Processing and canning charges
- 3) Fish waste disposal / management charges
- 4) Biogas Plant
- 5) Sulphuric Acid Generator

C. Medium and Long-term Farm (crop) Credit

i. Land improvement

- 1) Clearance of Jungle, leveling, layout, terracing, soil improvement, embankment, land formation, bund construction, reclamation of land and construction of Mini dams/Check Karez/ Water Reservoirs/Water Catchments for Rain-fed (Barani) Areas. Purchase of Agricultural Land for Marginal Farmers / Tenants (Land Acquisition Loans)

- 2) Water course Improvement Alignment, Lining, Silt clearance, Construction of Modules and Culverts, (Where Directorate of Water Management is not functioning), Construction of Pacca Water-course
- 3) Wells
 - a) Installation of tube- wells, repairs of tube- wells and Engines
 - b) Open wells
 - c) Persian wheels
 - d) Lift Pumps
 - e) Deep Turbines/Pumps
 - f) Electrical Installation including cost of Power lines and Transformer
- 4) Farm Power
 - a) Bullocks and Camels purchased for agricultural use
 - b) Tractors, Trailers and Implements
 - c) Repair of tractors and Replacement of Tractors tyres
 - d) Thrashers & Thrashing Machine for all agricultural crops
 - e) Tobacco Curing equipments
 - f) Other Agricultural equipments including Power Tillers, Sprayers, Mould Board Ploughs, Disc Ploughs, Chiesel Ploughs, Disc Harrows. Border Discs, Rotary Cultivators, Ridgers cum Bed shaper, Laser Leveler, Bulldozer for land leveling, Sunflower Harvester, Seed and Fertilizer Drills. Rotavators, Combined Harvesters, Cotton Pickers, Groundnut Diggers, Potato Diggers, Hole Diggers and Reapers/Cutters, Binder, Trolley, Cane Crusher, Tractor Pulled Combined Harvester, Combined Harvester, Bed Sowing Drills for wheat, oats etc, Bed Planter for Cotton, Maize, Sunflower etc., Mechanical Planters/ Pneumatic Planters for Cotton, Maize, Sunflower etc., Potato Planter, Sugarcane Planter, Fertilizer Spreader, High Capacity Paddy Thresher, Sunflower & Soyabean Thresher, Groundnut Thresher, Wheat Straw Chopper cum- Blower, Flail Mover, Stubble Shaver, Self Propelled Reaper for harvesting wheat and rice crops, Fertilizer Spreader for broadcasting chemical fertilizers evenly / uniformly. Rice Transplanter, Boom Sprayer (Tractor Mounted Sprayer) and other farm machinery and equipments for agricultural purposes including purchase of second hand tractor, thrashers, combined harvester and other old farm machinery free from all encumbrances
 - g) Purchase of local / Desi implements viz Yoke, Wooden / Iron Plough, Chlod Crusher, Wooden Leveler and any other locally manufactured implements / stroke machine
 - h) Hire charges for all agricultural machinery.
 - i) Extension of lease financing facility to the farmers under the scheme for pledging their tubewells, tractors, harvesters, jeeps, pickups, motorcycles

and machinery used for agricultural purpose with the banks for agricultural credit

- 5) Development loan for tea plantation/ palm oil
- 6) Tea Processing & Packaging Plant / Equipment
- 7) Cost of construction/ installation etc. of structures involved in Tunnel & Green House Technology for growth of Horticultural Produce
- 8) Rotary sprinkler / Water gun
- 9) High pressure pump
- 10) Straw / Dry fodder Pressing Machine
- 11) Wood working machinery
- 12) Food processing plant
- 13) Tomato paste making Units
- 14) Mini Juice extraction plants for citrus, mangoes and other fruits
- 15) Hay Baler
- 16) Saw Machine for Crate making for fruit
- 17) Kino / Mango / fruit polishing machines / Waxing machine
- 18) Arboriculture (wind breaker, shelter belts, hedges)
- 19) Orchards and Nurseries (including all dry fruits, Dates and Papaya etc.)
- 20) Fencing
- 21) Solar Energy Plants/Windmills including installation cost
- 22) Equipments for Sprinkle/ Trickle/Drip Irrigation System
- 23) Steel / Iron Tanks for Water supply / Storage at farm
- 24) Greenhouse Equipment / Technology
- 25) Construction of Cold storages and purchase of Refrigerator Van / Mini trucks by farmers
- 26) Construction of Godowns and Bins on farms
- 27) Fixed capital for storage of Raw agricultural farm produce
- 28) Purchase of Trucks bullock carts transport machinery, country boats, forklifts etc., Purchase of Pick-up and Mini Trucks for agricultural use
- 29) Purchase of Processing Machinery including seed dryers, vegetable dryers & fruit dryers for use at farms
- 30) Scientific Storage: System of commodity specific cold chain to be introduced from origin to destination
- 31) Packing & Weighing Machinery
- 32) Effective Microbes Technology (EMT)
- 33) Construction of Laboratory for Integrated Pest Management (IPM)
- 34) Personal Computer for Agricultural purpose
- 35) Agriculture Business Centres for Agriculture Graduates

D. Medium and Long-term non- farm (non crop) Credit

i. Livestock (Goat, Sheep and Cattle)

- 1) Feed Lots/ Fattening Station Structure and Equipments
- 2) Livestock Farm Structures and Equipments
- 3) Purchase of Fattening Animals, Goat, Sheep, Milch animals and male animals for breeding
- 4) Construction of Cold Storages by livestock producers
- 5) Milk Chilling Plant
- 6) Milk Processing Plant through cooperative system
- 7) Purchase of Motor Cycle and van for Milkmen
- 8) Chilling Vehicles / storage Equipment to enhance self life of Livestock products
- 9) Cost of construction of Building, Milk Chillers
- 10) Farm Construction (Sheds for animal equipments and other farm requisites) including thrashing yards, green house and plastic sheds
- 11) Opening of Private Veterinary Clinics (Veterinary Equipments, Purchase of Medicines Vaccines And Allied Hospital Facilities)
- 12) Opening of Veterinary Diagnostic Laboratories in private sector (Purchase of Media and Regents, Equipments and Allied Items)
- 13) Research based Farming needs
- 14) Opening of Private Artificial Insemination Centres (Purchase of Artificial Insemination Equipments And other Related Items)
- 15) Opening of Veterinary Medical Stores (Purchase of Veterinary Medicines Vaccines And Other Allied Items)
- 16) Compound Feed Making Industry
- 17) Slaughter House equipment
- 18) Blood / Bones processing units
- 19) Butter / cheese production units
- 20) Dairy Equipments and Animal feed plants
- 21) Cheese Making Equipments / Machines
- 22) Skimmed Milk Machinery and Abattoir

ii. Poultry

- 1) Construction of Cold Storages by Poultry Producers
- 2) Compound feed making industry for poultry
- 3) Purchase of poultry feathering machine
- 4) Air Conditioned Vans for marketing
- 5) Purchase of Pickups / Trucks for transportation of eggs / chicken from farm to market

iii. Forestry including Social Forestry

- 1) Tree plantation Including Bamboo/Sumbal/Pine tree/Diyar Cultivation & Nurseries for growing plants including Ornamental / Decorative plants
- 2) Apiculture
- 3) Sericulture

iv. Fisheries (Inland and Marine excluding deep sea fishing)

a) Inland

- 1) Excavators for silt cleaning & digging of ponds for fish farming etc.
- 2) Cost of Excavation/ Construction /Expansion and Rehabilitation of ponds
- 3) Cost of installation of tube wells/pumping sets/ ancillary structure
- 4) Water Channels
- 5) Fencing
- 6) Fishing Boats (Trawlers, Sail boats)
- 7) Nets, Twines and Ropes
- 8) Fish yards
- 9) Construction of cold storages by fishermen
- 10) Replacement of engines and spare parts
- 11) Air-conditioned vans for marketing

b) Marine

- 1) Marine Engines and spare parts
 - a) Replacement of Engines and Spare parts
 - b) New boats, trawlers, imported engines and other equipments
- 2) Other Boat Equipments (Floats, Lifebuoys, life jackets, Navigational lights, Compasses, Echo sounders, Insulation materials)
- 3) Purchase of Marine Engines (Outboard and Inboard)
- 4) Fishing boat and engine, Cold storage facilities
- 5) Cost of Plants including installation cost
- 6) Sulphuric Acid Generator

Note: *The list mentioned above is indicative.*

Appendix – B

Credit Requirements as Percentage of Cash Requirements

A. Short-term Farm (crop) Credit-for various farm sizes

Sr. No.	Items	Credit Requirements (%)		
		Small	Medium	Large
1.	Seeds, Fertilizers & Gypsum, Pesticides including Herbicides and Weedicides.	100	70	50
2.	Diesal Oil and Electricity Charges for Tube-well operation.	80	35	35
3.	Water (Charges for purchase of tube-well water)	75	65	50
4.	Farm power (Hire), Sprayers, Hired Farm Labor, Charges for Laser Leveling, Charges for purchase of diesel oil for tractor, Labor charges for Sugarcane stripping, Labor charges for Cotton picking, Labor charges for Rice sowing / Transplantation of nursery, Cost of contamination free cloth for Cotton picking.	100	50	40
5.	Orchards and Nurseries (including all dry fruits, Dates and Papaya), Commercially important minor crops like fruits, vegetables, pulses, oilseeds, onions and flowers including production loan for minor crops like Mentha Arvensis, Asparagus etc. being food crops.	65	55	40
6.	Production loan for growth of Mushroom.	100	70	50
7.	Fuel wood for curing of Tobacco	100	70	50
8.	Production Loans for off season vegetables growing in green houses and tunnels (under controlled environment farming system).	60	50	40
9.	Herbs / Roots Production on Commercial Basis.	65	50	25
10.	Production loan for commercially viable medicinal crops	60	50	40
11.	Storage, Transportation, Marketing, Grading, Packing and Processing by farmers from field only.	100	70	50
12.	Storage Hire Charges.	100	70	50
13.	Working Capital for Storage of Raw Agricultural/Farm produce.	40	40	40
14.	Transportation Hire Charges.	80	60	40
15.	Cost of Packing Material.	70	50	30

Sr. No.	Items	Credit Requirements (%)		
		Small	Medium	Large
16.	Land Lease / Contract charges for Fodder cultivation.			
	a) Transplantation Expenses.	60	60	60
	b) Inter Culturing Expenses.	60	60	60
	c) Farm Yard Manure.	70	70	70
17.	Purchase of packaging material for horticulture and floriculture.	50	50	50
18.	Effective Microbes Technology(EMT).	60	60	60
19.	Construction of Laboratory for Integrated Pest Management (IPM).	60	60	60

B. Medium and Long-term Farm (crop) Credit

Sr. No.	Items	Credit Requirements (%)		
		Small	Medium	Large
1.	Land improvement (Clearance of Jungle, leveling, layout, terracing, soil improvement, embankment, land formation, bund construction. For Development of New Land			
	Small Farms			80
	Medium & Large Farm.			80
	Reclamation of land			
	Small Farms			80
	Medium & Large Farm.			80
	Construction of Mini dams/Check Karez/ Water Reservoirs/Water Catchments for Rain-fed (Barani) Areas.			
	Small Farms			80
	Medium & Large Farm.			80
2.	Purchase of Agricultural Land for Marginal Farmers / Tenants (Land Acquisition Loans).			60
3.	Water Course Improvement (Alignment, Lining, Silt clearance, construction of Modules and Culverts, (Where Directorate of Water Management is not functioning). Construction of Pacca Water-course).			75

		(%)
Sr. No.	Items	Credit Requirements
4.	Wells	
	a) Installation of Tube wells.	90
	b) Repairs of Tube- Wells and Engine	40
	c) Open wells.	40
	d) Persian wheels	40
	e) Lift Pumps	40
	f) Deep Turbines/Pumps	40
	g) Electrical Installation including cost of power line and transformer	40
5.	Farm Power	
	a) Bullocks and Camels purchased for agricultural use.	60
	b) Tractors, Trailers and Implements, Repair of Tractors and replacement of Tractor tyres.	90
	c) Threshers & Thrashing Machines for all agricultural crops.	90
	d) Tobacco Curing equipments.	90
	e) Other Agricultural equipments including Power Tillers, Sprayers, Mould Board Ploughs, Disc Ploughs, Chisels Ploughs, Disc Harrows. Border Discs, Rotary Cultivators, Ridgers cum Bed shaper, Laser Leveler, Bulldozer for Land Leveling, Sunflower harvester, Seed and Fertilizer Drills. Rotavators, Combined Harvesters, Cotton Pickers, Groundnut Diggers, Potato Diggers, Hole Diggers and Reapers / Cutters, Binder, Trolley, Cane Crusher, Tractor Pulled Combined Harvester, Self Propelled, Combined Harvester, Bed Sowing Drills for wheat, oats etc, Bed Planter for cotton, Maize, Sunflower etc., Mechanical Planters/ Pneumatic Planters for Cotton, Maize, Sunflower etc., Potato Planter Sugarcane Planter, Fertilizer Spreader, High Capacity Paddy Thresher, Sunflower & Soyabean Thresher, Groundnut Thresher, Wheat Straw Chopper-cum-Blower, Flail Mover, Stubble Shaver, Triangular Disc Mover, for Fodder cutting, Self propelled Reaper for harvesting wheat and rice crops, Fertilizer spreader for broadcasting chemical fertilizer evenly / uniformly.	90
	Rice Transplanter, Boom Sprayer (Tractor Mounted Sprayer) and other farm machinery and equipments for agricultural purposes including purchase of second hand tractor, threshers, combined harvester and other old farm machinery free from all encumbrances.	

		(%)
Sr. No.	Items	Credit Requirements
	f) Purchase of local / Desi implements viz Yoke, Wooden / Iron Plough, Chlod Crusher, Wooden Leveler and any other locally manufactured implements / stroke machine.	50
	g) Hire charges for all agricultural machinery.	100
	h) Extension of lease financing facility to the farmers under the scheme for pledging their tubewells, tractors, harvesters, jeeps, pickups, motorcycles and machinery used for agricultural purpose with the banks for agricultural credit.	70
6.	Development loan for tea Plantation / palm oil.	75
7.	Tea Processing & Packaging Plant / Equipment.	60
8.	Cost of construction/ installation etc. of structures involved in Tunnel & Green House Technology for growth of Horticultural Produce.	50
9.	Rotary sprinkler / Water gun.	50
10.	High pressure pump.	50
11.	Straw / Dry fodder Pressing Machine.	40
12.	Wood working machinery.	50
13.	Food processing plant.	50
14.	Tomato paste making Units	30
15.	Mini Juice extraction plants for citrus, mangoes and other fruits.	50
16.	Hay Baler	40
17.	Saw Machine for Crate making for fruit.	50
18.	Kino / Mango / fruit polishing machines / Waxing machine.	50
19.	Arboriculture (wind breaker, shelter belts, hedges).	60
20.	Orchards and Nurseries (including all dry fruits, Dates and Papaya etc.).	70
21.	Fencing.	40
22.	Solar Energy plants/ Windmills including installation cost.	60
23.	Equipments for Sprinkle/ Trickle/Drip Irrigation System.	75
24.	Steel / Iron Tanks for Water supply / Storage at farm	80
25.	Greenhouse Equipment / Technology.	50
26.	Construction of Cold storages and purchase of Refrigerator Van / Mini trucks by farmers.	60
27.	Construction of Godowns and Bins on farms.	50
28.	Fixed capital for storage of Raw agricultural farm produce.	75
29.	Purchase of Trucks, bullock carts, transport machinery, country boats, forklifts etc., Purchase of Pick-up and Mini Trucks for agricultural use.	70
30.	Purchase of Processing Machinery including seed dryers, vegetable dryers & fruit dryers for use at farms.	50

		(%)
Sr. No.	Items	Credit Requirements
31.	Scientific Storage: System of commodity specific cold chain to be introduced from origin to destination.	50
32.	Packing & Weighing Machinery.	60
33.	Effective Microbes Technology (EMT).	50
34.	Construction of Laboratory for Integrated Pest Management (IPM)	50
35.	Agriculture Business Centres for Agricultural Graduates.	60
36.	Personal Computer for Agricultural purpose.	60

C. Short-term Non Farm (non cop) Credit

I Livestock

1. Feeds, Raising and Veterinary Expenses.
 - (a) Goat and Sheep
 - (i) Small Farm Unit (50-150 animals) 80
 - (ii) Large Farm Unit (above 150 animals) 50
 - (b) Meat Cattle (Feed Lots / Fattening Station / Milch Cattle. 100
 - (i) Small Farm Unit (50-150 animals) 75
 - (ii) Large Farm Unit (above 150 animals) 60
2. Artificial insemination unit services. 80
3. Packing material for meat, milk and other livestock products. 50
4. Working Capital for milk collection center. 75

II Poultry

1. Purchase of chicks
 - i) Broilers-Small Farm (Upto Five thousands birds) 85
 - ii) Broilers-Large Farms (Above Five thousands birds) 50
 - iii) Layers-Small Farms (500-1000 birds) 75
 - iv) Layers-Large Farms (Above 1000 birds) 50
2. Feeds and Raising Charges. 50
3. Poultry medicines 75
4. Financing for transport / shipment of poultry products to urban markets. 75
5. Packing and storage material. 60

III Fisheries (including inland and marine excluding deep sea fishing)

a) Inland

1. Fish seed, Fish Feed, Manuring, Running Charges of Tube Wel / Pumping Sets & Drying by Fishermen.
 - Small Fishermen (Owning Ponds upto 2 acres) 75
 - Large Fishermen (Owning Ponds of above 2 acres). 60
2. Running charges of tubwells/pumping sets. 50
3. Packing and storage material. 60

		(%)
Sr. No.	Items	Credit Requirements
b) Marine		
1.	Small Fishermen (owing only one Boat exceeding five gross ton capacity actively engaged in Marine Fishing.)	80
2.	Large Fishermen (Owning Boat/Boats exceeding five gross ton capacity actively engaged in Marine Fishing)	50
3.	Marine (Fuel, Ration and Ice for Marine Fisheries)	55
4.	Processing and canning charges.	75
5.	Fish waste disposal / management charges.	50

D. Medium and Long-term Non-farm (non crop) Credit

I Livestock (Goat, Sheep and Cattle).

1.	Feed Lots/ Fattening Station Structure and Equipment.	
	Small Farms	80
	Large Farms	60
2.	Livestock Farm Structures and Equipments.	
	Small Farms	80
	Large Farms	60
3.	Purchase of Fattening Animals, Goat, Sheep, Milk animals and Male Animals for Breeding.	70
4.	Construction of Cold Storages by livestock producers.	
	Small Farm	80
	Large Farm	60
5.	Milk Chilling Plant.	60
6.	Milk Processing Plant through cooperative system.	80
7.	Purchase of Motor Cycle and van for Milkmen.	75
8.	Chilling Vehicles / storage equipment to enhance life of Livestock products.	50
9.	Cost of construction of Building, Milk Chillers.	70
10.	Quality improvement / international accreditation of dairy processing plants.	60
11.	Meat processing plants.	60
12.	Purchase of Trucks for transportation of Milk from field to Market / Milk Plants.	80
13.	Farm construction (Sheds for animal equipments and other farm requisites) including thrashing yards, green house and plastic sheds.	60
14.	Opening of Private Veterinary Clinics (Veterinary Equipments, Purchase of Medicines Vaccines and allied Hospital Facilities).	80
15.	Opening of Veterinary Diagnostic Laboratories in private sector (Purchase of Media and Regents equipments and allied items).	80

		(%)
Sr. No.	Items	Credit Requirements
16.	Opening of Private Artificial Insemination Centres (Purchase of Artificial Insemination Equipments And other Related Items).	80
17.	Opening of Veterinary Medical Stores (Purchase of Veterinary Medicines Vaccines And other Allied Items)	80
18.	Compound Feed Making Industry.	80
19.	Slaughterhouse equipment.	80
20.	Blood / Bones processing units.	80
21.	Butter / cheese production units.	80
22.	Dairy Equipment and Animal feed plants.	80
23.	Cheese making equipment / machines.	80
24.	Skimmed milk machinery and Abattoir.	80
II Poultry		
1.	Hatchery Farm Structures and Equipments	
	Poultry Farm Structures and Equipments.	
	Small Farms	80
	Large Farms	60
2.	Construction of Cold Storages by Poultry Producers.	50
3.	Compound feed making industry for poultry.	70
4.	Purchase of poultry feathering machine.	60
5.	Air conditioned vans for marketing.	50
6.	Purchase of Pickups / Trucks for transportation of eggs / chicken from farm to market.	70
III Forestry (Including Social Forestry)		
1.	Tree plantation Including Bamboo / Sumbal/Pine tree/Diyar cultivation & Nurseries for growing plants including Ornamental / Decorative plants.	70
2.	Apiculture	80
3.	Sericulture (NWFP)	80
IV Fisheries		
a) Inland		
1.	Inland (Cost of Excavation / Construction, expansion and rehabilitation of ponds/cost of installation of tube wells/pumping sets/ancillary structure, Water Channels, Fencing and Fishing Boats (Trawlers, Sail Boats).	
	i) Small Fishermen (Owning Ponds of up to 2 acres)	80
	ii) Large Fishermen (Owning Ponds of above 2 acres)	60
2.	Requirements of Nets, Twines, Ropes and other equipments.	
	i) Small Fishermen	80
	ii) Large Fishermen	60
3.	Fish Yards	60

		(%)
Sr. No.	Items	Credit Requirements
4.	Construction of Cold Storages by Fishermen	25
5.	Replacement of engines and spare parts.	50
6.	Excavators for silt cleaning & digging of ponds for fish farming etc.	50
b) Marine		
1.	Marine Engines & Spare Parts and other Boat Equipments (floats, Life-buoys, life jackets, navigational lights, compasses, echo-sounders and insulation materials.	95
2.	New Boats, Trawlers, Imported Engines and other equipments	90
3.	Replacement of Engines parts.	95
4.	Purchase of Marine (Outboards/Inboards)	95
5.	Fishing Boat and Engine	95
6.	Cold Storage facilities.	75
V	Bio Gas Plant including Installation cost.	80
VI	Sulphuric Acid Generator	80