APPENDIX
Concepts and Definitions used in the Study

Rainfed or Dryland: By scientific definition, regions receiving annual rainfall in range of 750 mm to 1150 mm are categorized as rainfed area and regions receiving less than 750 mm of rainfall are categorized as dryland areas. However in the present study, both the terms, rainfed and dryland are used synonymously.

Agricultural Insurance: It is the insurance applied to the agricultural sector. It includes crop insurance, livestock insurance, aquaculture insurance and forestry.

Crop Insurance: Provides protection against loss or damage to growing crops including perennial crops such as tree crops against specified or multiple perils, e.g. hail, windstorm, fire, flood. Measurement of loss could be on yield basis, cost of production basis, agreed value basis.

Crop Yield: It is the measurable produce of economic value from a crop. This may be evaluated in terms of quantity and/or quality. Yields are stated in units like kg/ha or tones/ha.

Irrigation: A device purposely providing land with water other than rain water by artificial means.

Net Area Irrigated: The total of all the areas irrigated from different sources, counting each area irrigated only once even though it is irrigated more than once in the same year.

Gross Area Irrigated: Gross area irrigated includes total of all the areas irrigated more than once besides net irrigated area.

Operational Holdings: It includes area which is actually cultivated, including fallows by the farmer and his family irrespective of the title of the location.

Net Sown Area: The area where the crops are sown and include the areas sown more than once in a year.

Distressed farmer: The working group of Reserve Bank of India (2006-07) under the chairmanship of S.S. Johl considered the following two operational definitions for distress.
a. “Distressed farmer is one, who has suffered repeated income / psychological shocks due to failure of investment, weather, crop production or markets and which has crippled his ability to meet his financial and other family obligations and feels humiliated by the castigations of the lenders and in the absence of coping mechanisms, contemplates/takes the extreme step of voluntarily ending his life”.

b. “Distressed farmer is one who, inspite of his/her best rightful effort, is not able to earn income enough from his/her farm and non-farm activities to meet his/her genuine family needs. As a consequence he/she borrows from institutional and/or private sources, but is not able to generate enough additional repaying capacity to retire these loans, thereby landing into intractable indebtedness. In the circumstances he/she might take desperate step of even suicide”.

**Concepts of Cost:**

**Cost A1:** It includes

- a) Expenses incurred on hired labour.
- b) Expenses on owned and hired bullock labour.
- c) Expenses on owned and hired machine labour.
- d) Expenses on fertilizers and manure.
- e) Expenses on seeds.
- f) Expenses on pesticides
- g) Water tax
- h) Interest on working capital
- i) Depreciation (on buildings, implements etc.)

**Cost A2:** Cost C1 + Rent paid for leased-in-land

**Cost B:** Cost A2 + Rental value of owned land + Interest on fixed capital (excluding land)

**Cost C:** Cost B + Imputed value of family labour.

**Operational cost:** It includes cost of human labour (owned and hired), machine labour (owned and hired), seeds, manures, fertilizers and pesticides and water tax.

**Overhead Cost:** It includes interest on fixed capital, depreciation, rent paid for leased-in-land and rental value of own land.
**Paid out costs:** These costs refer to the expenses incurred on hired or purchased factors. These are the expenses made on seeds, fertilizers, pesticides, hired labour, hired bullock, hired machine labour and other hired or purchased inputs.

**Imputed costs:** These costs include imputed values of owned inputs of farmer such as interest on working and fixed capital, rental value of own land, value of family labour, depreciation, miscellaneous etc.

**Income Concepts:**

**Gross Income:** Gross income is the value of total output.

**Farm Business Income:** Farm business income represents returns to the farmer from land, family labour, interest on fixed capital and management. Gross Income – Cost A1

**Family Labour Income:** Family labour income is the returns to family labour and management farming. Gross Income - cost B.

**Net income:** Net income refers to the income from farm business. Gross Income – Cost C

**Farm investment income:** Farm investment income refers to the income from investment on farming. It includes rental value of owned land, interest on fixed capital and reward for management.