

THE ARUNACHAL PRADESH SOIL AND WATER
CONSERVATION ACT, 1991
Act No. 2 of 1992)

(Received the assent of the Governor on 13th January, 1992)

AN
ACT

to provide for management and improvement of soil and water conservation in the State of Arunachal Pradesh.

Be it enacted by the Legislative Assembly of Arunachal Pradesh in the Forty-second Year of the Republic of India as follows :--

CHAPTER--I

PRELIMINARY

1. (1) This Act may be called the Arunachal Pradesh Soil and Water Conservation act, 1991.

Short title,
extend and
commence-
ment.

(2) It shall extend to the whole of Arunachal Pradesh.

(3) It shall come in to force on such date as the Government may, by notification in the Officer Gazette. appoint.

2. In this Act, unless the context otherwise requires.--

Definitions.

(a) "beneficiary" in relation to any land benefited or likely to be benefited by the execution of a plan means an owner holder or occupier, of the land when the soil and water conservation Officer in view of the nature of his interest in the land and the benefits or likely benefits to the land from the execution of the plan, declares, in the prescribed manner, to be the beneficiary, and includes the successor in interest of the beneficiary ;

(b) "Board" means the State land Use Board established under section 3 ;

(c) "Chairman" means the chairman of the Board ;

- (d) "Commissioner" means the Commissioner of the Government of the Government of Arunachal Pradesh ;
- (e) "Deputy Commissioner" includes Additional Deputy Commissioner ;
- (f) "District Board" means the District Land use Board established under section 3 ;
- (g) "Government" means the Government of Arunachal Pradesh ;
- (h) "Plan" means a plan prepared under this Act ;
- (i) "Schedule" means a Schedule to this Act ;
- (j) "Secretary" means the member Secretary of the Board ;
- (k) "Soil and Water conservation" means reclamation, maintenance, protection and improvement of soil and water resources and includes any of the measures stated in the First Schedule ;
- (l) "Soil and Water Conservation Officer" means any officer appointed under section 6 ;
- (m) "State" means the state of Arunachal Pradesh ;
- (n) "Work" means any work carried out or to be carried out under a plan and includes pasture of forest provided for or raised under a plan ;
- (o) "Zila Parishad/Anchal Samity/Gram Panchayat" shall mean as defined under the North East Frontier Agency Panchayat Raj Regulation, 1967 (3 of 1967).

CHAPTER—II

CONSTITUTION OF THE SOIL AND WATER CONSERVATION BOARD AND DISTRICT SOIL AND WATER CONSERVATION COMMITTEE.

- Constotution
of State
Land Use
Board and
District Land
Use Board.
3. (1) As soon as may be after the commencement of this Act, the Government shall by notification in the Official Gazette constitute a State Land Use Board for the State and a District Land Use Board for each District and such Board shall consists of such number of members as may be specified in the notification.
- (2) The term of the members of the Board shall

be for such tenure or period as may be specified in the notification.

- (3) When a person becomes a member of the Board by virtue of office which he hold and when he ceased to hold that office he shall be deemed to be ceased the member of the Board from the date of ceasing to hold that office.

4. (1) The functions of the Board shall be :—

- (a) to lay down policies for soil and water conservation ;
- (b) to devise ways and means for co-ordinating and periodically reviewing the work under plans and for eliminating the difficulties in relation thereto ;
- (c) to scrutinise the progress made under the plans ;
- (d) to perform such other functions as may be specified by or under this Act.

Function of the Board.

- (2) The Board shall prescribe the procedure including quorum for the conduct of its business.

5. (1) The functions of the District Board shall be :—

- (a) to take steps to educate people in soil and water conservation ;
- (b) to direct the Soil and Water Conservation Officer to make a survey, collect data and prepare plans for the district or any part thereof and to perform such other functions incidental thereto ;
- (c) to consider and approve the plans so prepared ;
- (d) to take steps to ensure proper execution of the plans including identification of the institution for specific work and to watch the progress of work thereunder ;

Function of the District Board.

- (e) to make recommendations to the Board for securing efficient execution of the plans ;
 - (f) to carry out the directives issued by the Board from time to time with regard to a plan ;
 - (g) to undertake periodic review and appraisal of the plan ; and
 - (h) to perform such other functions as may be specified by or under this Act.
- (2) The District Board shall prescribe the procedure including the quorum for the conduct of its business.

Appointment
of Soil and
Water
Conservation
Officer.

6. (1) The Government may by notification appoint a Soil and Water Conservation Officer for each district for the purpose of this Act.
- (2) The Soil and Water Conservation Officer shall execute the plans and perform such other functions as may be prescribed by or under this Act.
- (3) The Government shall provide a multi-disciplinary organisation drawn from the disciplines of forestry, agriculture, land records, statistics to assist the Soil and Water Conservation Officer in formulating and making arrangement for executing the plans.

CHAPTER—III

PREPARATION OF WATER CONSERVATION PLAN

Preparation
of Soil and
Water
Conservation
Plan.

7. (1) Whenever it appears that in any area of a district it is desirable to provide for Soil and Water Conservation, the Government may by notification in the Official Gazette, notify the area in respect of which plans to be made :

Provided that if such area covers/belong to the Forest Department, such notification shall be issued after consultation with the Forest Department.

(2) After the notification issued under sub-section (1), the Board shall direct the District Board to prepare a plan setting out :—

- (a) the extent and details of the area to be covered by the plan, which shall be on water-shed basis ;
- (b) the details about the proposed works including all or any of the measures mentioned in the First Schedule ;
- (c) the programme for the execution of the plan ;
- (d) work to be carried out by a beneficiary at his own cost ;
- (e) the ways and means for the execution of the plan in which the available grant-in-aid shall also be taken into consideration ;
- (f) the institution through which the work shall be executed : and
- (g) such other particulars as may prescribed.

(3) In imposing liability on a beneficiary to carry out a work at his own cost, the benefits or likely benefits to his land for that work shall be taken into consideration.

8. (1) The plan prepared under section 7 shall be placed before the District Board who shall consider the same and order its publication in the manner provided in sub-section (2) and sub-section (3).

Consideration
and
approval of
the plan.

(2) Upon receipt of the order from the District Board the Soil and Water Conservation Officer shall prepare a notice in the prescribed form, stating the place and time for inspection of the plan by the public free of charge and such notice shall be published by affixation at the office of the Deputy Commissioner, Block Development Officer and in the village or area concerned through such Officer or public as may be considered necessary.

(3) A copy of the plan shall be sent to the village Head, gaon Buras, members of Panchayat and the individuals likely to be affected by such plan.

(4) On publication of the notice under sub-section (2) and (3) any person likely to be affected by the plan may, within thirty days from the date of publication, make objections or suggestions in writing to the Soil and Water Conservation Officer.

(5) On receipt of any objection or suggestion under sub-section (4) within the time notified thereon the soil and Water Conservation Officer shall hear in person in the prescribed manner and thereafter submit this report together with the objections and suggestions to the District Board.

(6) After considering the objections or suggestions and the report submitted under sub-section (5) or any further report, if any from the Soil and Water Conservation Officer, the District Board may approve the plan with or without any modification and the plan so made shall become final if it is approved by more than 50% of the beneficiaries.

(7) If more than 50% of the beneficiaries make objection to the plan, the plan together report of the Soil and Water Conservation Officer alongwith the recommendation of the District Board shall be placed before the Board for final decision and the decision of the Board shall be final.

Final
publication
of the plan.

9. The plan approved by the Board shall be published for final by the Soil and Water Conservation Officer in the prescribed manner and it shall be open for inspection by the public free of charge at the place and time notified in such publication.

CHAPTER—IV

TEMPORARY POSSESSION OF LAND AND PAYMENT OF COMPENSATION

Temporeary
possession
of land.

10. (1) If the Deputy Commissioner is satisfied that for the purposes of executing a plan it is necessary that temporary possession of any land should be taken, he may, by order, in consultation with the Zila Parishad, Anchal Samity Gram Panchayat concerned, direct the Soil and Water Conservation Officer to take temporary possession thereof for such period not exceeding five years, as may be specified in the order.

(2) The Deputy Commissioner may, order, extend from time to time the period of temporary possession, provided that the total period of temporary possession shall be in no case exceed twentyfive years in all for forest land and ten years in case of other land.

EXPLANATION:— (1) For the purpose of this section 'Land' does not include any land covered by a building of permanent character.

(2) The land owner's right to transfer land shall not be affected by this, but the rights of any tenants on the land shall be affected by the transfer.

11. The Soil and Water Conservation Officer or any other Officer authorised by him on his behalf shall, in pursuance of the order under section 10, take temporary possession of land :

Possession of land.

Provided that such possession shall not be taken without notifying in the prescribed manner the date and intention of taking possession at least fifteen days prior to such date.

12. (1) As soon as may be after the date of taking possession of the land, the Soil and Water Conservation Officer shall make inquiry and determine the compensation payable for every year or part of the year during which the land remains under such temporary possession and also the person entitled thereto.

Payment of compensation.

(2) For the purpose of determining and the persons entitled thereto, the Soil and Water Conservation Officer shall issue a general notice in the prescribed form and manner requiring persons concerned to file their claims in the prescribed manner by the date fixed in the notice, provided that the Soil and Water Conservation Officer may, for the reasons to be recorded, extend such date.

(3) The Soil and Water Conservation Officer shall also fix a date for hearing of the claims and shall on that date or in case of the hearing adjourned to any other date on such other date, hear in person and receive the evidence that may be produced by a claimant and also may take such other evidence as he considers necessary.

(4) For the purpose of determining the compensation and the persons entitled thereto the Soil and Water Conservation Officer shall have the same powers as are vested in the court under the Code of Civil Procedure, 1908 in respect of the following matters namely :—

- (a) enforcing attendance of any person and examining a person on oath or affirmation ;
- (b) issuing commission for examination of any witness or for local investigation ;
- (e) compelling production of any document ;

(5) In determining the compensation, regard shall be had to :—

- (a) the average net annual income from the land derived during the three years immediately preceding the date, temporary possession and in the case of land having no such income, the average net annual income, if any, from similar land in the locality derived during that period ;
- (b) the damage, if any sustained, by the person as a result of dispossession ;
- (c) the damage, if any caused or likely to be caused to the land ; and
- (d) such other factors as may appear to the Soil and Water Conservation Officer to be relevant for the purpose of such determination.

(6) Any person aggrieved by a determination made under sub-section (1) may, within thirty days from the date of such determination, file an appeal before the Deputy Commissioner or the Additional Deputy Commissioner who may pass such orders thereon as he deems fit.

(7) Against the decision of the Deputy Commissioner or the Additional Deputy Commissioner, the appeal shall lie to the Commissioner and finally to the Government, within the thirty days from the date of such determination or decision.

(8) The Commissioner or the Deputy Commissioner or the Additional Deputy Commissioner as the case may be, may entertain an appeal after the expiry of the said period of thirty days, if he is satisfied that there was sufficient cause for not preferring the appeal within that period.

(9) The compensation so determined shall be paid in cash in yearly instalments to the person entitled thereto under this section and such payment shall be a final and full discharge of the government and its officers from all liability to pay compensation for the period covered by the payment, but shall not prejudice the right of any other person to compensation to which he may be entitled by due process of law to enforce against the person to whom payment has been made under this Act.

(10) In case of permanent acquisition, it shall be done under the Land Acquisition Act, 1894.

13. (1) When the temporary possession of land is to be restored before the expiry of the period fixed for temporary possession, the Deputy Commissioner shall after making inquiry in the prescribed manner, by order, in writing :—

Restoration
of
possession.

(a) specify the person to whom the possession shall be restored ; and

(b) declare that possession of the land shall be restored to him on such date as may be specified in the order.

(2) On the date specified in the said order possession of land shall be deemed to have been delivered to the person mentioned therein.

(3) The delivery of possession of the property to the person specified in an order under sub-section (1) shall be final and full discharge of the Government and its officers from all liabilities in respect of the land but shall not prejudice any rights in respect of the property to which any other person may be entitled by due process of law to enforce against the person to whom the possession of the land is delivered.

(4) The Government may levy a tax called betterment contribution from the person to whom the temporary possession has been restored and who is benefited by the execution of the plan.

(5) The amount of betterment contribution payable in respect of any land, the temporary possession of which has been restored shall be such amount as may be determined by the Board or as may be prescribed :

Provided that the amount of the betterment contribution payable in respect of any land shall be as may be determined by the Board or as may be prescribed from time to time.

(6) During temporary possession or on restoration, the subsisting rights of tenants and share-croppers shall not be disturbed nor shall they be dislodged or evicted.

CHAPTER—V

EXECUTION OF THE PLAN

Directions
to execute
work.

14. (1) The Soil and Water Conservation Officer may, by notice, direct any beneficiary to carry out, at his own cost, any work which under the plan is to be carried out by the beneficiary at his own cost, in the manner and within the period as may be specified in the notice.

(2) Where a beneficiary intimates in writing to the Soil and Water Conservation Officer that he is unable to carry out the work within the time so notified or if the work is not carried out to the satisfaction of the Soil and Water Conservation Officer within the date fixed in that behalf or within such further time as he may allow, the Soil and Water Conservation Officer shall get the work carried out by himself and subject to the provision prescribed in this behalf, recover the expenses incurred from the beneficiary with such interest as may be prescribed.

(3) Notwithstanding anything contained in subsection (1) and (2), the Deputy Commissioner may in the interest of the general public, direct the Soil and Water Conservation Officer to carry out the work under the general direction of the Board and the costs of

such work shall subject to the provision prescribed in this behalf be recovered by the Soil and Water Conservation Officer from the beneficiary in such proportion as the Deputy Commissioner may fix, after taking into consideration of the benefit or likely benefits to the land of each beneficiary from that work and other relevant matters as certified by the Soil And Water Conservation Officer.

(4) If the costs are not paid by the beneficiary or beneficiaries within the prescribed time, such beneficiary or beneficiaries shall also be liable to pay such interest thereon as may be prescribed.

15. (1) The Soil and Water Conservation Officer shall submit to the District Board a report on the progress made in the execution of the plans in such form, manner and for such period as may be prescribed.

Progress
report.

(2) A copy of every progress report shall be forwarded to the Board.

16. The Soil and Water Conservation Officer shall, on completion of the work under a plan, prepare a statement in the prescribed form showing therein the rights and liabilities of the beneficiaries and shall forward the statement to the Deputy Commissioner who shall on the basis of the statement get the entries made in the relevant village records and maps maintained by the Revenue Department and the revenue records regarding rights and liabilities will be prepared in accordance with any law for the time being in force after following procedure prescribed.

Entry of
rights and
liabilities in
revenue
records.

17. (1) It shall be duty of the beneficiary ;

Discharge
of liabilities.

(a) to maintain and keep in repair at his cost any works as required by the plan ; and

(b) discharge other liabilities imposed upon him under the plan.

(2) Where a beneficiary fails to maintain or repair work or discharge a liability as required by sub-section (1) the Soil and Water Conservation Officer may cause the work to be maintained or repaired and liability to be discharge and the cost thereof shall be recoverable from the beneficiary.

Evaluation
of the plan.

18. The Board may direct the District Board or any other institution to evaluate any plan in accordance with the criteria mentioned in the second schedule.

CHAPTER—VI

PREVENTIVE ACTION AND PENALTIES

Prevention
of action
prejudicial
to Soil and
Water
Conservation.

19. (1) The Soil and Water Conservation Officer may issue a notice to any person who does any act on any land which is prejudicial to the interest of Soil and Water Conservation to suspend such act forthwith and the same shall remain suspended till the notice is discharged.

(2) The person on whom the notice is served may, within thirty days of its receipt, file objections before the Soil and Water Conservation Office.

(3) The Soil and Water Conservation Officer shall dispose of the objections after allowing the objector an opportunity of being heard and in case the objection is allowed, the soil and Water Conservation Officer shall discharge the notice, otherwise he shall pass an order prohibiting the person from doing such act.

(4) Any person aggrieved by an order of the soil and Water Conservation Officer under sub-section (3) may, within thirty days from the date of the order, file an appeal before the Deputy Commissioner whose decision thereon shall be final.

Penalties.

20. Whoever voluntarily or without proper authority damages or obstructs any work under a plan or contravene any of the provisions of this Act or any rule or order made thereunder, shall be liable, on conviction, to punish with an imprisonment for a period which may extend to six months or to a fine which may extend to one thousand rupees or both :

Provided that in case of continuing offence a fine of rupees twentyfive per day shall be liable to be imposed during the period of the continuance of such offence.

CHAPTER—VII**MISCELLANEOUS**

21. A proceeding under this Act before a Soil and Water Conservation Officer or a Deputy Commissioner or a Commissioner shall be deemed to be a judicial proceeding within the meaning of sections 193, 196 and 228 of the Indian Penal Court,

Proceedings under the Act.

22. No act or proceeding of the Board or the district Board shall be invalid by merely on the ground of existence of any vacancy in, or defect in the constitution of, the Board or the District Board.

Vacancy for defect in constitution not to invalidate proceedings.

23. If there is any difference of opinion amongst the member of the Board or of the District Board regarding any question, the decision of the majority of members present and votes shall prevail and in case of equality of votes, the Chairman of the Board or the District Board, as the case may be, shall have a casting vote.

Decision by majority of votes.

24 (1) Whenever considers necessary to make an enquiry or examination in connection with the preparation or execution of a plan or repair or maintenance of any work under a plan, the Soil and Water Conservation Officer, or any officer duly authorised in this behalf, may,—

Power to enter etc.

(a) enter upon any land and structure or anything attached to land and undertake surveys or take levels thereon ; and

(b) do such other things or section as they necessary or exercise all powers and do all things in respect of such land as may be ordered or directed by the Government under the provision of section 4 of the Land Acquisition Act, 1894, to the effect that land in the locality is likely to be needed for public purpose.

(2) In every case of entry upon any land the Soil and Water Conservation Officer or the person making the entry shall ascertain and record the extend of the damage, if any, caused by the entry or in the execution of a ny work, to any crop, tree or land and

within one month from the date of such entry, compensation shall be tendered by the soil and Water Conservation Officer, to the owner or occupier of the land or property as the case may be.

(3) If the tender of the compensation is not accepted within a week of the tender, the Soil and Water Conservation Officer shall forthwith refer the matter to the Deputy Commissioner who shall decide the matter forthwith and in determining the amount of compensation, the Deputy commissioner shall be guided by the provisions of section 23 and 24 of the Land Acquisition Act, 1894 :

Provided that regard shall be had to the diminution in the market value, at the time the awarding compensation is claimed, and where such market value is not ascertainable, the amount of the annual net profits of such property so damaged.

Registration
of docu-
ment.

25. Nothing in the Indian Registration Act, 1908, shall be deemed to require the registration of any document or map forming part of plan prepared under this Act.

Public
access to
documents
and maps.

26. Subject to the rules made under this Act any persons shall have access to all documents and maps pertaining to plans and copies thereof shall be furnished to any person applying for the same on payment of the prescribed fee.

Determinations
and orders
to be final.

27. Save as otherwise provided by or under this Act, any determination or order made in pursuance of the provisions of this Act or the rules made thereunder, shall be final and shall not be questioned in any court of law.

Sanction for
prosecu-
tion.

28. No suit, prosecution or other proceeding shall lie against any Officer or servant of the Government for any thing done or action taken under this Act, without the previous sanction of the Government.

Provisions
of this Act
to over-ride
other law.

29. The provisions of this Acts shall have affect notwithstanding anything inconstant therewith contained in any other law the time being in force,

Powers
make rules.

30. (1) The Government may, by notification in the Official Gazette, make rules for carrying out the purposes of this Act.

(2) Without prejudice to the generality of the foregoing powers such rule may provide for all or any of the following matters, namely :—

- (a) the procedure for the manner of declaring a person to be beneficiary ;
- (b) matters relating to the constitution of the Soil and Water Conservation Board and District Soil and Water Conservation Board ;
- (c) appointment of Soil and Water Conservation Officers and its powers and functions ;
- (d) the manner of notifying the intention and date of taking over of temporary possession ;
- (e) the manner of enquiry for determining the compensation payable for the land of which temporary possession has been taken and the persons entitled thereto ;
- (f) the time within which the costs of work carried out by the Soil and Water Conservation officer shall be paid by the beneficiary and the interest on such costs ;
- (g) the form in which and the intervals at which progress report shall be submitted by the Soil and Water Officer ;
- (h) the form of statement of rights and liabilities of the beneficiaries ;
- (i) the statements, returns, registers and other record required to be maintained by or under this Act ;
- (j) the form and manner of service or publication of notices under this Act or the rules made thereunder ;
- (k) filling and disposal of objections and appeals under this Act and the procedure to be followed in regard thereto ;
- (l) the duties of any officers or authority having jurisdiction under this Act and the procedure to be followed by such officer or authority ; and
- (m) any other matter which is to be or may be prescribed.

FIRST SCHEDULE

[See section 7 (2)]

Soil and Water Conservation scheme under section 7 may include all or any of the following items :—

(1) Identification of priority watersheds in accordance with the methodology prescribed by the Board.

(2) Survey and investigation of priority watershed for preparation of management of plant.

(3) Measures relating to control of erosion due to water and wind, such as :—

- (a) Construction of contour/graded bunds (narrow base terrace), bench terraces bund is with surplusing arrangements for planting on earthfill surfaces ;
- (b) levelling of land and improvement of soil by applying appropriate amendments, measures and fertilisers ;
- (c) adopting appropriate farming/tillage practices, such as contour cultivation, strip cultivation, shallow/deep cultivation etc. ;
- (d) growing up quick maturing leguminous crops during rainy season and growing row crops with appropriate conservation measures ;
- (e) retirement of any land from cultivation if its continuance under agriculture is prejudicial to that land or some other land ;
- (f) afforestation of degraded forests and non-agricultural lands alongwith closures and necessary soil moisture conservation practices with a view to promoting improved tree growth; from forests and village woodlots ;
- (g) development of grasslands and fuel-fooder reserves in waste lands, community/ government lands with appropriate erosion control and moisture conservation measures such as contour dykes and check dams, etc. ;

- (h) control/regulation of grazing, felling or lopping of trees or clearance of bushes ;
 - (i) raising of utility tree plants on private/community/waste lands with a view to provide additional supplies of food fodder as well as vegetables, besides raw-materials for subsidiary industries and income there from such as planting of sisal, cashewnut, sasbania grandflora drum, stick, amla etc. ;
 - (j) planting and growing of trees, shrubs or grasses for providing shelter belt or wind breaks for other protection purposes ;
 - (k) prevention for breaking up marginal and sub-marginal lands for cultivation purposes ;
 - (l) controlling and establishing, torrents landslides and slips, road-side and cattle paths erosion, etc by biological and engineering measures, such as check dam, spurs retaining walls, revetments, etc.
- (4) Construction of earth and masonry work in field gullies and ravines, including catch water drains, wherever necessary.
- (5) Construction of small storage structures including ponds at appropriate locations in private community/government lands with a view to increasing surface detention and depression storage in the catchment to promote greater infiltration, reduce silt load in channel flows, peak flows farms, ponds and other water harvesting measures such as combined with erosion and gully control works, restoration of degraded lands for better management, for increasing institutionalisation of incident rainfall by creating potential for providing protective/supplemental irrigation and increases productions taking up nalla plugging, field bundhis, percolation tanks, etc. with a view to increase better ground water recharge and subsequent utilisation for productive as well as domestic use of water.
- (6) Measures for controlling water logging and impeded drainage, development of water logged areas into ponds, opening of drainage ditch, increasing

number of culverts and other cross drainage works for releasing large portions of the affected area for development and utilisation for productive management.

(7) Development and reclamation of lands subject to salinity, alkalinity, by providing appropriate drainage system with storage ponds, whenever necessary, applying amendments, impounding water for washing down the injurious salts and taking up appropriate crops for reduction of harmful salts for increasing aggregate production.

(8) Improvement of sandy soil by constructing bundhis, planting of grasses, shrubs and trees, levelling of a land, restricting depths of cultivation, growing leguminous crops and controlling grazing and exploitation.

(9) Taking up consolidation of holdings in accordance with the relevant law on the subject in areas for better use of land and available water and disposal of the excess water.

(10) Maintenance and repair of works conducive to soil and water conservation, whether these works are executed under the plan or otherwise.

(11) Introduction of system for utilising products such as sisal leaf, cashew pods, etc. for enhancing employment and income therefrom.

(12) Such other measures as may become necessary under the given physiographic, climatic and socio-economic conditions prevailing in the area and as prescribed by the District Board or the board.

SECOND SCHEDULE

(See Section 18)

EVALUATION OF THE SOIL AND WATER CONSERVATION PLANS

Soil and WATER conservation plans needs to be evaluated or appraised periodically for identifying technical approaches for measuring benefits and collecting time series data for the purpose and to

identify the kinds of benefits and also their subdivisions. The benefits will comprise in general as follows :—

A. PROTECTIVE BENEFITS :

- (i) Direct land protection against erosion such as gullying ;
- (ii) Protection to the existing production from eroding lands mentioned under (1) above ;
- (iii) Appreciated value of restored land ;
- (iv) Proportionate investment on dam and its command, protected under major, medium and minor irrigation projects.

B. PRODUCTIVE BENEFITS :

- (i) Additional rainfed production from catchment of the structure ;
- (ii) Additional production from mini command of the structures ;
- (iii) Production from restored and irrigated lands which were otherwise cut of cultivation or plant management.

C. EMPLOYMENT GENERATION :

- (i) Casual employment due to construction of bunds, terraces, raising of plantation etc ;
- (ii) Regular employment due to intensification of land management or improvement of cropping/plant management ;
- (iii) Ratio of the post-project employment (regular) can be termed as employment improvement ratio and taken as an index for charging the affectiveness of the plan and its implementation. The evaluation shall take into account the investment made on plan/ treatment etc.
- (iv) Land treatment ;
- (v) Land restoration ;

(vi) Construction of erosion control and water harvesting structures ;

(vii) Mini Command Development.

In order to carry out such analysis it would be necessary to select certain mini project areas representing typical package of conservation practices and provide adequate funds and personnel for collection of pre-project and post project data. The collection of data can be of two categories :—

- (i) Hydologic and sedimentation including climatic and watershed attributes ; and
- (ii) Socio-economic data which will cover family, size and economics, holdings, crop and plant management production and return, employment.