

The Arunachal Pradesh Soil And Water Conservation Act, 1991 Act 2 of 1992

Keyword(s): Beneficiary, Soil, Soil And Water Conservation Officer, Anchal Samity

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THE ARUNACHAL PRADESH SOIL AND WATER CONSERVATION ACT, 1991

(Act No. 2 of 1992) (Received the assent of the Governor on 13-1-92.)

AN ACT

to provide for management and improvement of soil and water conservation in the State of Armachal 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 Short Soil and Water Conservation Act, 1991.

title, extend and commencement.

- (2) It shall extend to the whole of Arunachal Pradesh.
- (3) It shall come into force on such date as the Government may, by notification in the Official Gazette, appoint.
 - 2. In this Act, unless the context otherwise requires,—

Definitions.

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- (a) "beneficiary" in relation to any land benefitted 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 Arunachal Pradesh;
- (e) 'Deputy Commissioner' ircludes 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;
- "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) "Zilla Parishad/Auchal 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

- Constitution of this Act, the Government shall by notification of State in the Official Gazette constitute a State Land Land Use Board for the State and a District Land Use Board and Board for each District and such Board shall consists District of such number of members as may be specified Land Use 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 he hold and when he ceased to hold which that office he shall be deemed to be ceased the member of the Board from the date of ceasing to hold that '20190

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- (1) The functions of the Board shall be:-
- Function of the Board.
- (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 plants and for eliminating the difficulties in relation thereto;
- (c) to scrutinise the progress made under the plan;
- (d) to perform such other functions as may be specifid by or under this Act.
- (2) The Board shall prescribe the procedure including quorum for the conduct of its business.
- (1) The functions of the District Board shall be -
- (a) to take steps to educate people in soil and water conservation;
- Functions of the District Board.
- (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;
- (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.

Appoint-Water

6. (1) The Government may by notification appoint a Soil and Water Conservation Officer for each district ment of Soil and Water Conservation Soil and for the purpose of this Act.

Conservation Officer.

- (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 Conser vation 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/tclong to the Forest Department, such not fication 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;
 - 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;

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- (f) the institution through which the work shall be executed; and
- (g) such other particulars as may be prescribed.
- (3) In imposing liability on a beneficiary to carry out a work at his own cost, the benefits or likes 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 provide in sub-section (2) and sub-section (3).

Consideration and approval of the plan.

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- (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 publics, 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-sections (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 Border.

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(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 be publication of the plan.

(9) The plant approved by the Board shall 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

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- 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 Zella 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, by order, extned 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 concred 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.

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Possession of land. 11. The Soil and Water Conservation Officer or any other Officer authorise by him on his tehalf shall, in pursuance of the order under section 10, take temporary 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 Payment taking possession of the land, the Soil and Water Con- of comservation Officer shall make inquiry and determine the pensation. compensation payable for every year or part of the year during which the land remains under such temporary possession and also the persons entitled thereto.

- (2) For the purpose of determining compensation 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 persons 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 attendence 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 prossession 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 aggricved 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 acquistion, it shall be done under the Land Acquistion Act, 1894.
- Restoration of to be restored before the expiry of the period fixed for possesion.

 to be restored before the expiry of the period fixed for possesion.

 temporary possession, the Deputy Commissioner shall after making inquity in the prescribed manner, by order in writing:—
 - (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.

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- (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 a final and fell discharge of the Government and its officers from all liabilities in respect of the lind but shall not proj dice any rights in respect of the property to which any other person may be entitled by the 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 postersion has been restored and who is benefited by the execution of the plan.
- (5) The amount of betterment contribution payable in respect of any lind, 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 physible in respect of any land shall be as may be determined by the Board or as may be prescribed from time to time.

(6) D. ring temporary possession or an restoration, the subsisting rights of tenants and share croppers shall not be disturbed nor shall they be disledged or evicted.

CHAPTER—V EXECUTION OF THE PLAN

14. (1) The Soil and Water Conservation Officer may, by no ic:, direcet 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

Directions to execute work.

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(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 sub-sections (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.

Progress report.

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

Entry of rights and completion of the work under a plan, prepare a statement liabilities in the prescribed form showing therein the rights and in revenue records. 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.

Discharge of liabililities.

- 17. (1) It shall be the duty of the beneficiary;
 - (a) to maintain and keep in repair at his own cost any works as required by the plan; and
 - (b) to discharge other liabilities imposed upon him under the plan.
- (2) Where a beneficiary fails to maintain or repair the 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 discharged and the cost thereof shall be recoverable from the beneficiary.

18. The Board may be direct the District Board Evalua-or any other institution to evaluate any plan in accord-tion of ance with the criteria mentioned in the second schedule. the plan.

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CHAPTER-VI

PREVENTIVE ACTION AND PENALTIES

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.

Prevention of action prejudicial to Soil and Water Conservation.

- (2) The person on whom the notice is served may, within thirty days of its receipt, file objections, before the Soil and Water Conservation Officer.
- (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 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.
- 20. Whoever voluntarily or without proper authority Penalties. 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**

Proceed- 21. A proceeding under this Act before a Soil and ings under Water Conservation Officer or a Deputy Commissioner the Act, or a Commissioner shall be deemed to be a judicial proceeding within the meaning of sections 193, 156 and 228 of the Indian Penal Code.

Vacancy for defect to invalidate proceedings.

2?. No act or proceeding of the Board or the District Board shall be invalid by merely on the ground in consti- of existence of any vica cy in, or defect in the constitution not a tion of, the Board or the District Board.

Decision by mijority of votes.

23. If there is and 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 voted shall prevail and in case of equal ty of votes, the Chairman of the Board or the District Board, as the case may be, shall have a casting vote

Power to enter etc.

- 21. (1) Wienever considers necessary to make an enquiry or examination in connection with the preparation or ecution of a plan or repair or maintenance of any work under a plan, the Soil and Water Conservation Officer, any Officer dely authorised in this behalf, may,
 - enter upon any land and structure or anything attached to land and undertake surveys or take levels thereon; and
 - do such other things or action as may consider 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.
- In every case of entry upon any land the and Water Conservation Officer or the person the entry shall ascertain and record the extent of damage, if any, caused by the entry or in the execution of any 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 sections 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 demaged.

- 25 Nothing in the Indian, Registration Act, 1908 shall Registrabe deemed to require the registration of any document tion of or map forming part of plan prepared under this Act. document.
- 26. Subject to the rules made under this Act any persons shall have access to all documents and maps pertaining cess to to plans and copies thereof shall be furnished to any documents person applying for the same on payment of the presented fee.
- 27. Save as otherwise provided by or under this Determina-Act, any determination or order made in pursuance of tions and the provisions of this Act or the rules made thereunder, orders to shall be final and shall not be questioned in any court be final of law.
- 28. No suit, prosecution or other proceeding shall Sanction lie against any Officer or servant of the Government for for proseanything done or action taken under this Act without cation. the previous sanction of the Government.
- 29. The provisions of this Act shall have affect not- Provisions withstanding anything inconsistent therewith contained in of this Act any other law for the time being in force.

 to over-ride other law.
- 30. (1) The Government may, by notification in Powers the Official Guzette, make rules for carrying out the purmake poses of this Act. rules.

- (2) Without prejudice to the generality of the foregoing powers such rules 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 notifiying the intention and date of taking over of temporary possession;
 - 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 Conservation Officer;
 - 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 watershed in accordance with the methodology prescribed by the Board.
- (2) Survey and investigation of priority watershed for preparation of management of plan.
- (3) Measures relating to control of erosion due to water and wind, such as :—
 - (a) Construction of contour/graded bunds (narrow base terrace), banch terraces bund is with surplusing arrangements for planting on earth fill 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 moisure conservation practices with a view to promoting improved tree growth; from forests and village woodlots;
 - (g) development of grasslands and fuel-cum-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 submarginal lands for cultivation purposes;
- (I) 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 mesonary works in field gallies 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 detension 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 crosion 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 reclimation of lands subject to salinity, alkalinity, by providing appropriate drainage system with storage ponds, whenever necessary, applying

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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 liguminous 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 conductive 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, cachew 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

Sail 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 also to identify the kinds of benefits and their sub-divisions.

The benefits will comprise in general as follows:-

A. PROTECTIVE BENEFITT:

- (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 so 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 (reatment;
- (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 date. The collection of data can be of two categories:—

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