EVALUATION OF COMPREHENSIVE DISTRICT AGRICULTURE PLANS (C-DAPs) OF 3 DISTRICTS OF RAJASTHAN

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FOREWORD

The Rashtriya Krishi Vikas Yojana (RKVY) was launched by the Government of India in 11th Plan to achieve much needed 4 per cent agricultural growth rate. An important condition laid down for obtaining 100 per cent central assistance under RKVY was that each state will prepare Comprehensive District Agriculture Plans (C-DAPs). The Planning Commission had provided detailed guidelines for preparing C-DAPs. Accordingly, such plans have been prepared for each district of the Rajasthan State.

The Agro Economic Research Centre, Vallabhbh Vidyanagar (AERC, VVN) had been asked by the Planning Commission and the Ministry of Agriculture, GOI to review the C-DAPs prepared for three districts (Udaipur, Kota and Bikaner) of Rajasthan.

Keeping in view the guidelines and detailed parameters for reviewing C-DAPs provided by the Planning Commission, the AERC, VVN project team carefully reviewed the district plans after having extensive discussions with various stakeholders and subject matter specialists. The present report provides separate review for each selected district. It also provides an overview of C-DAP work on the basis of lessons learnt from the experience of three districts as well as valuable feedback received from the discussions with state level officials.

I am highly thankful to Dr. Dilip Bagchi, Retired Professor, Department of Economics, S P University, V.V.Nagar and Dr. (Mrs.) Rajeshree A. Dutta, Deputy Director, AERC who have put in a lot of effort to prepare this report. I am also equally thankful to Shri Manish Makwana, Research Associate and Ms. Bhumika Padhiyar, Computer, Cost of Cultivation Scheme who provided useful support in preparing this report.

We are grateful to the Government of Rajasthan, Jaipur, Department of Agriculture (Government of Rajasthan) of three districts, Aravalli, Agriculture
Universities, NABARD and other agencies / individuals who have provided valuable help / guidance in preparing this report. It is hoped that this report will be found useful by those interested in agriculture planning and development.

Date: 18.10.2011
Place: Vallabhbh Vidyanagar

R. H. Patel
Director
Acknowledgement

The AERC project team has benefited greatly from discussion at various levels with following individuals and organizations.

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(2) Shri Ashok Chauhan, Joint Director of Agriculture (Plan), Commissionerate of Agriculture, Government of Rajasthan, Jaipur

(3) Dr. H. S. Sur, Senior Consultant, Planning Commissionerate, Government of India, New Delhi

(4) Dr. Surjit Singh, Director, IDS, Jaipur.

(5) Director (P & M ), Maharana Pratap University of Agriculture and Technology, Udaipur, Rajasthan

(6) Shri Satyadev Singh, Deputy Director of Agriculture (Extension), Government of Rajasthan, Udaipur

(7) Dr. P. K. Gupta, Joint Director (Research), Agriculture University, Udaipur

(8) Dr. RPS Yadav, Project Manager, IFFDC, Udaipur

(9) Dr. Tomar, KVK-In charge, Udaipur

(10) Shri D. R. Godhara, Deputy Director of Agriculture (Extension), Government of Rajasthan, Kota

(11) Mr. Abuj Kishor, Aravali, Jaipur

(12) Dr. N. D. Yadav, Principal Scientists, Chairman, CAZRI, Bikaner

(13) Dr. Pravin Singh Rathor, Zonal Director (Research), Agriculture Research Station, Agriculture University, Bikaner

(14) Dr. Jagdish Punia (Dy.Director-Extension) and Dr. Udaybhan (Dy.Director), Department of Agriculture, Government of Rajasthan, Bikaner

(15) Shri Manojkumar Singh, Institute of Fundamental Studies and Research, Bikaner

(16) Dr. Bhupendra Kumavat, District Development Manager, NABARD, Bikaner

The AERC V.V.Nagar is grateful to all of them for their valuable help and support.
CHAPTER-1
INTRODUCTION

The Agro-Economic Research Centre, Vallabhb Godarth, (AERC, VVN) had been asked by the Planning Commission, GOI to review the Comprehensive District Agriculture Plans (C-DAP) prepared for three districts (Udaipur, Kota and Bikaner) of Rajasthan. Reports of these three districts were obtained from the Commissionerate of Agriculture, Government of Rajasthan, Jaipur and Department of Agriculture, Government of Rajasthan, Udaipur.

The RKVY has been launched in the 11th plan to achieve much needed 4% agricultural growth rate. An important pre-condition laid down for obtaining 100 percent central assistance under RKVY has been that the states will prepare Comprehensive District Agriculture Plans (C-DAP) for each district.

C-DAP is a bold and major initiative for achieving a vital breakthrough in the planning process. A participatory bottom up approach should help in preparing development plans reflecting the felt needs and aspirations of the people at the grass root level. Preparation of district plans on the basis of specific and detailed guidelines provided in the Planning Commission Manual was a massive and time bound effort. It is obvious that such a participatory planning process cannot be implemented overnight. It will be a slow learning process to be nurtured over a period of time. Hence, the initial plans prepared at the district level will suffer from several limitations. However, this planning process deserves all possible support and encouragement for strengthening the planning system at the grass root level.

The AERC, VVN had constituted a project team to review the C-DAPs prepared in Rajasthan. The AERC project team had useful discussion at various levels with government / non government organizations.

The work regarding the preparation of C-DAPs of Rajasthan districts were carried out by Department of Agriculture, with the help of NGOs, Consultants, etc.

The C-DAPs of Tonk, Jhalawar, Baran, Kota, Bundi, Jaipur, Ajmer and Dausa had been prepared by ARAVALLI.
Our team received excellent support, co-operation and help from the officials of government, NGOs and other agencies during their visit to Udaipur, Kota and Bikaner. Also support and help received from the Rajasthan government at Jaipur was very encouraging. Team had detailed discussion with all the officials involved in preparation of C-DAPs in all three districts. It was found that they have put up lots of efforts in preparation of these C-DAPs reports. Even though due to local situation, they could not follow completely Planning Commission manual, the report prepared by them is relevant and comprehensive. A C-DAPs report contains an analysis of the current status of the agriculture and allied sectors in the districts with reference to its needs and potential. It also contained a plan and action to be implemented over the next five year to realize their potential. It incorporated specific project, including the projects sanctioned under RKVY, which reflect the felt needs of the districts.

Keeping in view the guidelines for preparing C-DAP and the detailed parameters for review provided by the Planning Commission, the AERC, VVN project team has carefully reviewed the development plans for three selected districts.

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CHAPTER-2
EVALUATION REPORT OF C-DAP: UDAIPUR DISTRICT

The Comprehensive District Agricultural Plan (C-DAP) of Udaipur District was received by the Agro Economic Research Centre (AERC, VVN) from Department of Agriculture, Government of Rajasthan. The C-DAP has been prepared by Department of Agriculture, Udaipur, Government of Rajasthan through participatory process involving stakeholders and various organizations. Indian Farm Forestry Development Crop Ltd. (IFFDC) was also involved in preparation of C-DAP. The first draft C-DAP report for Udaipur district received and reviewed by the AERC project team suffered from several limitations. However, the revised final draft has been a substantial improvement. The review is based on the revised final draft.

Keeping in view the guidelines for preparation of C-DAP circulated by the Planning Commission, the Udaipur district report was carefully and thoroughly reviewed by the project team constituted by AERC, VVNagar. The project team also paid visit to the offices of the Department of Agriculture, Udaipur, Indian Farm Forestry Development Crop Ltd., and Zonal Director, research, Udaipur Agriculture University, and had very useful discussion with the officials who were directly connected with the C-DAP and also with the different stakeholders of the scheme.

The evaluation report is prepared as per the review parameters provided by the Planning Commission, Government of India.

The following observations are made:-

I. Status of C-DAP preparation in the State.
   i. Number of districts in the state? : 32 (33rd Districts in January, 2008)*
   
   ii. Number of districts for which C- DAP prepared : 32
   
   iii. If C-DAPs for all districts not prepared by what time rest of C-DAPs will be ready?
   Not Applicable

* A new 33rd district named Pratapgarh was created in January, 2008.
II. Constitutional aspects of planning

1. General
   i. DPCs formed or not? (District Planning Committee)
      - Yes, DPC was constituted at the district level but the procedure followed is not mentioned in the Report.
   ii. C-DAP approved by the DPC or not? If not, what is the institutional mechanism at the district level through which it was passed?
      - Yes, C-DAP has been approved by the DPC.
   iii. Has C-DAP been integrated with DDP or not? (District Development Plan)
      - Yes, while preparing C-DAP, DDP has been taken into account.

2. Has participatory bottom-up approach been followed or not?

   Was information collected from ‘Gram Sabhas’?

   Yes. The approach followed in the preparation of this plan is through participatory bottom-up process. Design of the format for collection of data needed for plan preparation has been prepared on the basis of regular workshop meetings. The responsibility for preparing C-DAP was given to IFFDC Ltd. Udaipur branch in collaboration with Department of Agriculture (Extension) Udaipur.

   Furnish information in the given table if the information from ‘Gram Sabhas’ not collected:

   a) What other consultative process (es) were followed in the plan preparation? What is the extent to which inputs from sub-district level have contributed to the planning exercise? Here the factual position may be described.
      - Not Applicable
   b) Whether agriculture planning units (APUs) at village, block/taluka and district level viz. VAPU, BAPU and DAPU actually exist. If not, what other mechanism was used for preparation of C-DAP

      DAPU was formed. Existing set up at block and village level was used for preparation of C-DAP. Village level, Gram Panchayat level and Block level action plan were taken into account in preparation of C-DAP. Besides formal and informal
meetings with staff of agriculture and line developments, members of Panchayat Raj institutions and farmers were conducted at different levels. Resource teams also conducted in depth farm/village level study covering important aspects of agriculture and allied fields. The task of collection of primary data was entrusted to field level factionary and NGO’s on pre-structured formats.

<table>
<thead>
<tr>
<th>Name of District</th>
<th>No. of Blocks/tehsils</th>
<th>No. of Villages-inhabitant</th>
<th>No. of Gram Sabhas held</th>
<th>No. of Block/Tehsil level meetings</th>
<th>No. of District level meetings*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Udaipur</td>
<td>Blocks-11 Tehsils-10</td>
<td>2384</td>
<td>467</td>
<td>11</td>
<td>5</td>
</tr>
</tbody>
</table>

*Schedule of these meetings circulated/ announced well in advance of not?
Date, time and place of the meeting were announced well in advance

III. Technical aspect of planning

1. Is Plan Comprehensive?

   i) Is C-DAP based on the felt-needs of the farmers or not?  
     - Yes, to a large extent it is based on the felt needs of the farmers.

   ii) Was a separate vision document prepared or not? If yes, was this vision reflected in C-DAP preparation in the form of vision statement or not?  
     - Yes, The vision and strategy document has been prepared in a comprehensive manner. To a large extent the vision document covers the objectives mentioned in the Planning Commission manual.

   iii) Were all departments (agriculture and allied activities) involved in planning?  
     - Yes, A workshop with the district level officials of department of agriculture and allied departments was organised on 11.08.2008 and again on 25.08.2008 to appraise all the stakeholders with the aims and objectives of C-DAP. A workshop of field level functionary of department of agriculture and allied sectors was organised on 31.12.2008 for training in C-DAP. An interaction with District Planning Committee members was arranged on 27.01.2009 to seek their cooperation in planning.
iv) All agricultural and allied developmental activities being carried out in the district by governmental and non-governmental agencies, accommodated in the C-DAP or not? Provide following information:

<table>
<thead>
<tr>
<th>Name of District</th>
<th>No. of Govt. Schemes / Programmes</th>
<th>Schemes/ Programmes referred in C-DAP</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Central</td>
<td>State</td>
</tr>
<tr>
<td>Udaipur</td>
<td>6</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Name of District</th>
<th>No. of Non-Govt. Schemes / Programmes**</th>
<th>Schemes/ Programmes Referred in C-DAP</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>NGS 1</td>
<td>NGS 2</td>
</tr>
<tr>
<td>Udaipur</td>
<td>Not indicated</td>
<td>Not indicated</td>
</tr>
</tbody>
</table>

** NGS 1, NGS 2, NGS 3 refer to non government programmes/ schemes effectively being implemented in the district by agency like Bank, SHG or any other agency.

v) Were efforts made to address?

a) Emerging challenges from global trade and climate changes
- The district plan is quite comprehensive and has taken into account the emerging challenges from global trade and climate changes.

b) Innovative approach which can improve the livelihood and economic condition of the people in the area

Some specific projects are proposed for increasing farm income, productivity, employment and income. For example, seed production programme for maize and wheat. This programme will be executed on public-private (PPP-mode) in selected 8-10 villages. In order to save seed from wastage, seed storage bins (41500) on subsidised rate are proposed to be given on priority to BPL/SC/ST, women farmers of the district. Village adoption (132 villages) scheme is proposed. Besides, extension activities include training for agriculture and allied department’s staff, farmers training programmes, soil testing programme, farmer’s field schools etc. Financial and physical targets of many programmes from 2007-08 to 2011-12 are given, but numbers of farmers to be benefited are not mentioned. Several useful programmes for animal husbandry, horticulture, fisheries and water resource development have been included in the district plan.
The district plan has come out with many innovative schemes and special projects for agriculture and allied activities to achieve the projected growth rates. These schemes and projects will also encourage farmers to enhance capacity building and entrepreneurship development to fulfill production, marketing and post harvest value addition requirements.

c) **Priority areas as per agro-ecological situation.**

- The selected programmes are quite useful and cover a wide range of activities. A detailed information is given in the Report for the XIth plan period (2007-12).
- The year wise targets and financial break up is given for all the blocks (11 in all) on page 72 of the Report. Though number of farmers to be benefited from these programmes is missing.
- The programmes supported by RKVY funds or through other sources is also mentioned in detail.
- The district has 2 agro-climate Zones:

<table>
<thead>
<tr>
<th>Agro-ecological situation</th>
<th>Characteristics</th>
<th>Block covered</th>
<th>Priority areas</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>IV A</strong></td>
<td>Sub-humid Southern Plain and Aravalli Hill</td>
<td>Girwa, Mavli Bhinder, Badgaon, Gogunda, Jhadol, Kotra, Kherwara</td>
<td>Not mentioned</td>
</tr>
<tr>
<td><strong>IV B</strong></td>
<td>Humid Southern Plain</td>
<td>Salumber Sarada, Dhariawed</td>
<td>Not mentioned</td>
</tr>
</tbody>
</table>

2. **Capacity building of Planning Committees (PCs) and APUs and others involved in planning.**

   i) **Number of trainings/workshops. Meetings conducted for capacity building of the planning units**

   Several meetings were conducted at Jaipur and also at district level. Actual numbers not mentioned in the report.

   ii) **Material for No. (i) Prepared and distributed or not? If yes, enclose specimens**

   Yes. Department has used website of Planning Commission and C-DAP manual.
iii) Has Plan Plus or any other software been used to facilitate planning or not?

No “Plan Plus” or any other software used while preparing the report.

3. Data Collection and Analysis for Planning (Quantity and Quality of data)

i. Sources-

a. Name the sources:

Tehsil/District Panchayat offices, Directorate of Agriculture, Directorate of Animal Husbandry and Directorate of Horticulture, NGOs etc. are the main data collection centres.

b. Give suggestions for improving data sources:

Sources of data not mentioned in report. Invariably mention the sources of data and reference year of the data given. If block wise data are available present them block wise.

Collect and present all the available data as per table format given in C-DAP manual (Planning Commission).

ii. Quantity and Quality of data satisfactory or not? If not, what more data was needed? How the quality of data can be improved?

Many tables as suggested in C-DAP guideline are given in the report. The sources of data and reference years of data are generally not quoted. For some tables block wise data are not given.

Many tables are not given at all. These tables are related to plan to improve agriculture and allied activities, training facilities for farmers at taluka level, marketing, infrastructure for agricultural produce, soil survey, organic input, some information on horticulture, livestock, poultry, fisheries and proposed plan for handloom, agro-processing, progress during 10th plan period for different schemes etc.

Besides tables are not numbered and the report has not followed. C-DAP manual while preparing the tables.

4. Parameters of data analysis-

i. SWOT analysis of LB/District done thoroughly or not? (It should be of the district and not the individual activities)
The SWOT analysis of the district has been presented on pages 37 to 42 of the C-DAP report. The district is in the centre of theme and the work done is quite satisfactory.

ii. **Block data to explain spatial disparities/variabilities of the district given or not?**

District wise data are given but block wise data as per manual are not presented in some tables. For example, taluka wise data are missing for land holding, crop wise NPK consumption, farm machinery status and projection, planning for farmers training programme, chemical fertilizer requirements etc.

iii. **Gaps for important variables worked out or not?**

Yield gap analysis of major crops which is very important for planning has been presented in the report. Also mentioned are crop wise critical gap and strategies / issues to reduce these gaps in productivity. There is no mention about research/extension, adoption, processing, storage, and marketing gaps in the report.

iv. **Trends from the data collected for important variables like land use parameters, agro-based industry, production, productivity, population, population growth and migration, employment opportunities, etc. taken into account or not?**

Data on land use pattern, agro based industry (partial), production, productivity and population are given. The data on population growth and migration, employment opportunities are not given.

v. **Summary tables prepared or not for discussions to synthesize needs/problems/potentials in a participatory mode?**

Some tables on yield gap are prepared mentioning problems, needs etc. The executive summery is given but summary tables are not prepared.

vi. **Base maps and district profile given or not? Are these adequate?**

Except district Udaipur with blocks, no other maps are given.
5. Synthesis of needs, problems and potentials

Parameters

Those are reflected in the various development programmes suggested for agriculture and allied activities.

A. SWOT analysis of the district.
   SWOT analysis is quite satisfactory.

B. Inputs from Gram Sabhas
   Analysis of the data given in the report is satisfactory. It was also felt that adequate inputs from villages are obtained and included in analysis.

C. List of these needs/problems/potentials given or not?
   Most of the needs/problems/potentials spelt out in the report.

D. Has prioritization of needs been done or not? Give the list of prioritized needs.
   a) Prioritization has not been done. A number of useful projects have been suggested. The priorities of the projects should be decided keeping in view the agro-climate conditions as well as felt needs of the people.

6. Study of ongoing programmes in the area

Parameters-

i) Were on-going programmes and schemes been studied or not?
   - Yes, Information of some on going programmes/schemes are given in the report.

ii) How many needs, problems, potentials and solution interventions have been addressed through on-going programmes/schemes?
   - Largely addressed through ongoing programmes/schemes.

iii) How many funds were available from on-going programmes? Were these converged to formulate C-DAP or not?
   - This is not cleared in the report. However, yearwise financial breakup (2007 to 2012) for different scheme is given in the report. While preparing C-DAP, to avoid overlapping expenditure, sectorwise analysis was carried out.
7. Formulation of projects in C-DAP

Parameters-

i) Were the projects and works identified on the bases of: a) Prioritized needs, b) benefits expected, c) expenditure involved and d) availability of needed material or infrastructure taken into account?

- The projects and works were identified on the basis of needs. Expected expenditure and physical achievement is shown year wise for 2007-08 to 2011-2012 in the report under title stream I and II, i.e. physical and financial programmes proposed under C-DAP during XI Plan, agriculture and allied sector (2007-12). Also consolidated details in financial terms are given in the report. Since physical programme is also spelt out, it seems that availability of needed material and infrastructure is taken into account.

ii) Was the decision logistics in deciding projects and works improved by discussion with the planning committee or not? (This ensures participation at various levels of C-Dap preparation)

- Officers or persons involved in the preparation of C-DAP - Deputy Director of Agriculture (ext.), heads of allied activities of agriculture, officials of IFFDC Ltd. Also invited experts from MANAGE, Hyderabad, KVK and NABARD, Udaipur etc.

- Are they member of technical support group (TSI)- Yes.

- Informal meetings were held at block/village level as well as with ATMA (Agriculture Technology Management Agency)- Yes

8. In a number of district plans so far received, the procedure followed (in the plan preparation) is not clear. As a result some of the issues will become difficult to review. Therefore, the planning units may be advised to include one chapter/ section describing methodology of preparing C-DAPs with the following details.

i) Sources of data- official documents, sample surveys, Rapid Rural Appraisal (RRA), Participatory Rural Appraisal (PRA), case-study method or any other method followed

- One village from each block was taken for case study.
ii) Technical methodology followed in arriving at the cost estimates of the proposed projects in the plan or at least a reference to the respective DPRs.
   - Yes technical methodology was followed in arriving at the cost estimates of the proposed projects.

iii) Description of the consultative processes followed. Details of the procedure followed in village level, block level and district level consultations may be provided. A copy of the village and block level schedules canvassed, if any, may also be included.
   - Schedules used.

iv) A scheme of convergence (functional and convergence) among the existing programmes/ schemes.
   - Not in the report

v) Any other detail important to preparation of C-DAP
   - Explained earlier. Every village level, Gram Panchayat level and Block level Action Plan were taken into account while preparing C-DAP.

9. Programme delivery spelt out or not? A table showing Name of department, project/works/activities entrusted to each department and funds provided are shown in C-DAP or not?
   - Yes. Some important tables are not furnished in the report. C-DAP manual guidelines have been followed to some extent.

10. Monitoring and evaluation mechanism suggested or not?
    - No suggestions are given on monitoring and evaluation mechanism.

11. Others
    Awareness about this planning initiative was found among the concerned officials of agriculture and allied department, State Agriculture Universities and few personnel and NGO. It seems from the report that farmers were well acquainted with Government schemes such as farm ponds, NREGS, Awas Yojana, RKVY, C-DAP etc.
General observations:
- The maps/graphs/charts suggested in C-DAP manual should be given. Many tables as per C-DAP manual are incorporated in the report. However, the source of data and reference year of data should be given in all tables.
- It would be better to give data on land utilization, area, production and yield with latest 3 years average.
- Development vision and strategy are given in the report. The statement was prepared in consultation with all stakeholders and reflects the felt needs and aspirations of district people. The vision statement provides a picture of desired and possible development in agriculture and allied sectors in the coming years.
- SWOT analysis is satisfactory.
- Financial target and achievement during X Plan in the district under district and State sector schemes are not given. It needs to be presented along with targeted growth at the end of XI Plan.
- It is necessary to give detail tehsil/block wise analysis wherever possible. It is necessary to compile data showing current status of the district in various spheres of development vis-à-vis the State.
- Plan plus software not taken into account in the report.

Overall the report is satisfactory and it seems that the C-DAP team has done hard work to make the report useful. When their opinion was asked about, why they have not followed all the 1 to 78 tables of Planning Commission manual, their argument was that it was not possible to collect all the information at the field level.
CHAPTER-3
EVALUATION REPORT OF C-DAP: KOTA DISTRICT

The Comprehensive District Agricultural Plan (C-DAP) of Kota District was received by the Agro Economic Research Centre (AERC, VVN) from Commissioner Agriculture, Government of Rajasthan, Jaipur. The C-DAP has been prepared by ARAVALI.

The AERC Project team paid visits to the offices of Department of Agriculture, Kota, NABARD and KVK. It also had detailed discussion with the officials of ARAVALI who were responsible for preparing C-DAP.

Keeping in view the guidelines for preparation of C-DAP circulated by the Planning Commission and the parameters suggested for review work, the Kota district report was carefully reviewed by the project team constituted by AERC, VVN.

I. Status of C-DAP preparation in the states.
   i. Number of districts in the state? : 32 (33rd district in January, 2008)*
   ii. Number of districts for which C-DAP prepared : 32
   iii. If C-DAPs for all districts not prepared by what time rest of C-DAPs will be ready?
       -Not Applicable

II. Constitutional aspects of planning
1. General
   i. DPCs formed or not?
      - Yes, DPC was constituted at the district level but the procedure followed is not mentioned in the Report.
   ii. C-DAP approved by the DPC or not? If not, what is the institutional mechanism at the district level through which it was passed?
      - Yes. C-DAP has been approved by the DPC.

* A new 33rd district named Pratapgarh was created in January, 2008.
iii. Has C-DAP been integrated with DDP or not?
- Yes. While preparing C-DAP, DDP has been taken into account.

2. Has participatory bottom-up approach been followed or not?

The participatory bottom-up approach has been followed. The district agriculture plan has been formulated in three stage process.

First, it includes in-depth study of one of the representative of Gram Panchayats (GPs) in each block of the district. The study includes field visits, discussion with people segment wise (small/marginal farmers, medium/large farmers, landless and women), and gathering of information using some participatory rural appraisal tools. This helped in identifying the key issues in the area. Secondly, for estimation of the extent of such issues in the block, further consultation were held at block level with officials of line departments particularly those related to agriculture and allied activities. Finally, consultations with district level officials were made to identify district level issues. In the whole process information from secondary sources like statistical handbooks, Census data, potential linked credit plan, strategic plan and other documents were referred as and when required.

Was information collected from ‘Gram Sabhas’?
Furnish information in the given table if the information from ‘Gram Sabhas’ not collected:

- Yes. Information from gross root level were collected, i.e., from Gram Panchayat level.

a) What other consultative process (es) were followed in the plan preparation? What is the extent to which inputs from sub-district level have contributed to the planning exercise? Here the factual position may be described.

- About 30 to 40% inputs have been taken from sub-district level. [This information AERC Project team received from ARAVALI Personals at Kota meeting.]
b) Whether agriculture planning units (APU’s) at village, block/ taluka and district level viz. VAPU, BAPU and DAPU actually exist. If not, what other mechanism was used for preparation of C-DAP

- It was reported that DAPU was formed but VAPU does not exist. As for BAPU, it partially exists. In the preparation of C-DAP, Agriculture supervisors, Compounders (animal husbandry) and village Patwaries’ help was taken as and when required.

<table>
<thead>
<tr>
<th>Name of District</th>
<th>No. of Blocks/ talukas</th>
<th>No. of Villages</th>
<th>No. of Gram Sabhas held</th>
<th>No. of Block/ Taluka level meetings*</th>
<th>No. of District level meetings**</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kota</td>
<td>5</td>
<td>947</td>
<td>Many</td>
<td>Three meeting in each Block 5*3 = 15</td>
<td>4</td>
</tr>
</tbody>
</table>

*Schedule of these meetings circulated/ announced well in advance or not?

Gram Sabhas, Block level and district level meeting days and times were circulated among concerned persons well in advance.

III. Technical aspect of planning

1. Is Plan Comprehensive?
   i) Is C-DAP based on the felt-needs of the farmers or not?
   - Yes, to a large extent it is based on the felt needs of the farmers.
   
   There was a different schedule based on agro climatic zone.

   ii) Was a separate vision document prepared or not? If yes, was this vision reflected in C-DAP preparation in the form of vision statement or not?
   - Yes, in a comprehensive manner the vision and strategy document has been prepared. To a large extent the vision document covers the objectives mentioned in the Planning Commission manual.

   iii) Were all departments (agriculture and allied activities) involved in planning?
   - Yes, all the departments (agriculture and allied activities) were involved in planning.
iv) All agricultural and allied developmental activities being carried out in the district by governmental and non-governmental agencies, accommodated in the C-DAP or not? Provide following information:

Yes, all the activities were accommodated in the C-DAP.

<table>
<thead>
<tr>
<th>Name of District</th>
<th>No. of Govt. Schemes* / Programmes</th>
<th>Schemes/ Programmes Referred in C-DAP*</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Central</td>
<td>State</td>
</tr>
<tr>
<td>Kota</td>
<td>6</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Name of District</th>
<th>No. of Non-Govt. Schemes / Programmes</th>
<th>Schemes/ Programmes Referred in C-DAP</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>NGS 1</td>
<td>NGS 2</td>
</tr>
<tr>
<td>Kota</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

** NGS 1, NGS 2, NGS 3 refer to non government programmes/ schemes effectively being implemented in the district by agency like Bank, SHG or any other agency.

* Other schemes are on sharing basis like 90:10, 70:30 etc.

(v) Were efforts made to address a) Emerging challenges from global trade and climate changes? b) Innovative approach which can improve the livelihood and economic condition of the people in the area c) Priority areas as per agro-ecological situation.

The district plan is quite comprehensive covering a number of traditional and innovative programmes in agriculture and allied sectors.

To improve the agricultural production in the district, one important programme is to i) improve the seed replacement rate to about 60% from the present level of about 30% and ii) to decrease the yield gap between the current yield and the potential yield.

In case of animal husbandry, the programme’s main objective is to provide veterinary services to farmers at the nearest possible location. The criteria of deciding the nearest possible location are:-

i) Veterinary hospital within five kilometers, and

ii) A sub centre within three kilometers.

Behind the success of all horticultural plantations, watch and ward and fencing plays a great role. Realizing this, trench fencing, the least costly amongst the all types of fencing, is made popular amongst the farmers. It is not only less costly,
but also has a major labour component which is available locally and this gives extra income to the local population.

One of the most innovative projects is mobile Agri-Clinic. Given the shortage of extension staff it is not always possible to put extension officials at every village. To solve this problem mobile Agri-Clinic has been proposed as a part of the project. The mobile Agri-Clinic will follow a particular route chart by which it will cover all the remote locations every month. Other than the regular routes, the mobile Agri-Clinic will also make special trips to problem areas as when required. This way many farmers particularly the small and marginal farmers will get proper information about various aspects of agriculture.

The other selected programmes are quite useful for overall agricultural development of the district. They are:-

i. Improving the agricultural infrastructure,
ii. Mobile Veterinary Clinic,
iii. Green house Project,
iv. Electronic Display and Weighing System at Block Level Mandis
v. Multi-Chamber Cold Storage etc.

C) Priority areas as per agro-ecological situations.

- In the report, the vision and strategy statement has to a certain extent taken into account priority areas as per agro-ecological situation.

2) Capacity building of Planning Committees (PCs) and APUs and others involved in planning.

i. Number of trainings / workshops. Meetings conducted for capacity building of the planning units.
   - Jaipur –2 meeting (with different district, D.D.)
   - 5 meeting with Principal secretary Commissioner of Agriculture, Addi. Director, Joint Director Plan, State level 4 workshops at Jaipur for 3 training batches for planning process and capacity building.

ii. Material for No. (i) Prepared and distributed or not? If yes, enclose specimens.
   - Yes
iii. Has Plan Plus or any other software been used to facilitate planning or not?
- No

3. Data Collection and Analysis for Planning (Quantity and Quality of data)

i. Sources---

a. Name the sources:

The major sources are as follows:-
- Taluka/District Panchayat offices; NABARD, Jaipur; District Statistical Office, HDR, Rajasthan update 2008, GoR/IDS, Jaipur; Agriculture Technology Management Agency; Directorates of Agriculture, Horticulture and Animal Husbandry; DRDA office; Soil Survey Department; Other related Departments and NGOs.
- 11th Five year Plan, District CPO.
- SREP (Strategic Research and Extension Plan) under ATMA.
- PLCP (Potential Linked Credit Plan), NABARD.
- District Statistical Profile (Directorate of Economics & Statistics)
- Annual Report of Agriculture Department, Animal Husbandry Department, Horticulture Department.

b. Give suggestions for improving data sources:

Data collected should be presented as per table formats (1 to 78) given in C-DAP manual. Invariably mention the source of data and reference year of the data given.

ii. Quantity and Quality of data satisfactory or not? If not, what more data was needed? How the quality of data can be improved?

Though most of the data required by C-DAP manual has been collected, the tables prepared are not as per the Manual. Thus, though the report is comprehensive in itself, yet it has not followed the Manual. It was reported that the reason for not following all the manual tables was that it was practically not possible at the field level.
4. Parameters of data analysis-

i. **SWOT analysis of LB/District done thoroughly or not? (It should be of the district and not the individual activities)**

   The SWOT analysis of the district has been presented on page 27 of the C-DAP report. The district is at the centre of theme and the work done is quite satisfactory.

ii. **Block data to explain spatial disparities/variabilities of the district given or not?**

   Block wise data on geographical units, agriculture and allied sectors, irrigation, livestock related infrastructure, Sector wise issues and problems etc, has been used to explain spatial disparities/variabilities of the district.

iii. **Gaps for important variables worked out or not?**

   Yield gap analysis is very important as mentioned in Table no.27 of Planning Commission Report. This has not been attempted, either at district or block level.

iv. **Trends from the data collected for important variables like land use parameters, agro-based industry, production, productivity, population, population growth and migration, employment opportunities, etc. taken into account or not?**

   The data on land use pattern, production, productivity are taken into account. Population growth, migration, employment opportunities, etc. are not taken into account. No information regarding trends on these items are given in the report.

v. **Summary tables prepared or not for discussions to synthesize needs/problems/potentials in a participatory mode?**

   Executive Summary and summary tables have been prepared. The report has not followed the Planning Commission Manual in the preparation of its tables (1 to 78 as per manual).
vi. Base maps and district profile given or not? Are these adequate?

Base maps and district profile, has been given but it would have been better if the maps had been enlarged.

5. Synthesis of needs, problems and potentials

These are reflected in the various development programmes suggested for agriculture and allied activities.

Parameters

Needs/problems/potentials were synthesized taking into account the following or not?

a) SWOT analysis of the district. Inputs from Gram Sabhas

   SWOT analysis is quite satisfactory.

b) Inputs from Gram Sabhas

   The study team has taken such inputs through field visits, discussion with people segment wise (small/marginal farmers, medium/large farmers, landless labours and women) and gathered information by using some participatory tools.

c) Detailed analysis of the Data

   Though in depth analysis of data is made, it would have been a better if the report had followed the tables (1-78) given in Planning Commission Manual.

d) List of these needs/problems/potentials given or not?

   Most of the needs/problems/potentials spelt out in the report.

e) Has prioritization of needs been done or not? Give the list of prioritized needs.

   A number of projects have been suggested. But prioritization has not been suggested. The priorities of the projects should be decided keeping in view the agro-climatic conditions as well as felt needs of the people.
6. Study of ongoing programmes in the area

Parameters-

i) Were on-going programmes and schemes been studied or not?
Yes, the report has mentioned various activities like district level special projects, district level departmental projects and block level projects.

ii) How many needs, problems, potentials and solution interventions have been addressed through on-going programmes/schemes?
Indepth study has been made on:
Three district level special projects,
Nine district level departmental projects,
Eight block level projects

iii) How many funds were available from on-going programmes? Were these converged to formulate C-DAP or not?
There has been a plan of about Rs. 360 crores, apart from another Rs. 55 crores planned for other ongoing schemes in the district, such as:
- National Rural Employment Guarantee Scheme (NREGS)
- National Horticulture Mission (NHM)
- State Work Plan (Agriculture, Animal husbandry)
- Subsidy through various other schemes
- Yes, the on going schemes were converged to formulate the C-DAP report.

7. Formulation of projects in C-DAP

Parameters-

i) Were the projects and works identified on the bases of: a) Prioritized needs, b) benefits expected, c) expenditure involved and d) availability of needed material or infrastructure taken into account

The projects and works were identified on the basis of needs, benefits expected, expenditure involved and availability of material or infrastructure needed. The expected expenditure to be made during XIth Plan and year wise data in a tabular form have been worked out. While preparing the tables, for talukas and district as a whole, both physical as well as financial aspects have been taken into account.
ii) Was the decision logistics in deciding projects and works improved by discussion with the planning committee or not? (This ensures participation at various levels of C-Dap preparation)

The work was entrusted to ARAVALI. While preparing the report, the Aravali team members held meetings and discussions at GP level with people segment wise. Further consultations were held at block level with officials of line departments particularly those related to agriculture and allied activities. Finally, at district level, consultation with district level officials was made to identify the district activities. Also information from secondary sources like Statistical hand books, census information, potential linked credit plan, strategic plan and other published documents are also used.

8. In a number of district plans so far received, the procedure followed (in the plan preparation) is not clear. As a result some of the issues will become difficult to review. Therefore, the planning units may be advised to include one chapter/section describing methodology of preparing C-DAPs with the following details.

   i) Sources of data-official documents, sample surveys, Rapid Rural Appraisal (RRA), Participatory Rural Appraisal (PRA), case-study method or any other method followed

   For data sources, in the case of primary data, at GP level, Participatory Rural Appraisal tools were used. At the blocks, consultations were held with concerned block level officials. At the district level, consultations with district officials were held to identify the district level activities.

   ii) Technical methodology followed in arriving at the cost estimates of the proposed projects in the plan or at least a reference to the respective DPRs.

   The methodology followed in arriving at the cost estimation of the proposed projects is explained in the report while dealing with these projects.
iii) Description of the consultative processes followed. Details of the procedure followed in village level, block level and district level consultations may be provided. A copy of the village and block level schedules canvassed, if any, may also be included.

   Explained earlier. From the report it is not clear whether any village or block level schedules have been canvassed.

iv) A scheme of convergence (functional and convergence) among the existing programmes/schemes.

   Not explained in the report.

v) Any other detail important to preparation of C-DAP

   Explained earlier in the report.

(This will help the reader to know about the procedure followed and activities undertaken during preparation of C-DAP)

9. Programme delivery spelt out or not? A table showing Name of department, project/ works/activities entrusted to each department and funds provided are shown in C-DAP or not?

   Year wise physical and financial targets for various activities have been provided. Some tables have been furnished but they don’t conform to Planning Commission Manual.

10. Monitoring and evaluation mechanism suggested or not?

   No suggestions are given on monitoring and evaluation mechanism.

11. Others

   Awareness about this planning initiative was found among the concerned officials of agriculture and allied department, State Agriculture Universities and few personnel & NGO. It seems from the Report that farmers were well acquainted with. Government schemes such as farm ponds, NREGS, Awas Yojana, RKVY, C-DAP.

General Observations:

- The maps/graphs/charts suggested in C-DAP manual should be given.

- However, the source of data and reference year of data should be given in all tables.
- It would be better to give data on land utilization, area, production and yield with latest 3 years average.
- Development vision and strategy are given in the report. The statement was prepared in consultation with all stakeholders and reflects the felt needs and aspirations of district people. The vision statement provides a picture of desired and possible development in agriculture and allied sectors in the coming years.
- SWOT analysis is satisfactory.
- It is necessary to give detail tehsil/block wise analysis wherever possible.
- It is necessary to compile data showing current status of the district in various spheres of development vis-à-vis the State.
- Plan plus software not taken into account in the Report.

Overall the report is satisfactory and it seems that the C-DAP team has done hard work to make the report useful. When their opinion was asked about, why they have not followed all the 1 to 78 tables of Planning Commission manual, their argument was that it was not possible to collect all the information at the field level.

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CHAPTER-4
EVALUATION REPORT OF C-DAP: BIKANER DISTRICT

A comprehensive district agriculture plan (C-DAP) of Bikaner District was received by the Agro Economic Research Center (AERC, VVN) from Commissioner Agriculture, Government of Rajasthan, Jaipur.

This C-DAP has been prepared by Department of Agriculture, Bikaner through participatory process involving stakeholders and various organizations. The project team had detailed discussion with the officials of Department of Agriculture, Central Arid Zone Research Institute, Research Centre Agricultural University, Bikaner, NABARD and NGO.

Keeping in view the guidelines for preparation of C-DAP circulated by planning commission and the parameters suggested for review work, the Bikaner district report was carefully and thoroughly reviewed by the project team constituted by AERC, VVN.

This evaluation report is prepared as per the parameters for review provided by the Planning Commission, GOI.

I Status of C-DAP preparation in the States.
   1. Number of districts in the States : 32 (33rd district in January, 2008) *
      ii Number of districts for which C-DAP prepared? : 32
      iii If C-DAPs for all the districts not prepared by what time rest of the C-DAPs will be ready?
         Not Applicable

II Constitutional aspects of Planning
   1. General Parameters
      i) DPCs formed or not?
         - Yes, DPC was constituted at the district level.

* A new 33rd district named Pratapgarh was created in January, 2008.
ii) C-DAP approved by the DPC or not? If not what is the institutional mechanism at the district level through which it was passed?
   - Yes. C-DAP has been approved by the DPC.

iii) Has C-DAP been integrated with DDP or not?
   - Yes. C-DAP has been integrated with DAP.

2. **Has participatory bottom – up approach been followed or not?**

   **Parameters –**

   The responsibility for preparing C-DAP of Bikaner district was given to Department of Agriculture (Extension), Bikaner. The C-DAP was prepared taking broad guideline from the report prepared by the Planning Commission, Government of India. The approach followed in the preparation of the document was participatory bottom up appraisal mode. The Central Arid Zone Research Institute, (CAZRI) Regional Research Station (RRS) Bikaner was identified as Technical Support Institute (TSI). The TSI, under the guidance of Head CAZRI, RRS, Bikaner, provided all necessary technical help to planning units and support groups for the preparation of the Plan through participatory bottom up process. The TSI thus formed, trained the planning Units/Groups in the district in Participatory Rural Appraisal techniques, designed formats for data collection, guided in data collection and analysis and conducted regular workshops and meetings.

   The task of collecting village wise primary data of the district was entrusted to five NGO’s. The NGO teams, after received proper training from TSI, collected the data on Pre-structured formats. The data was collected with wide consultations of farms/farmers groups as well as Gram Panchayat level works from the relevant fields-Formal and informal meetings with staff of agriculture and line departments, members of Panchayat Raj Institutions and farmers were conducted at different level.

   Resource teams also conducted in-dept farmer/village level study covering important aspects of agriculture and allied fields- for this, the district was divided into two distinctively Agro-Eco situation (AES) as was done for SREP preparation under ATMA scheme. From each AES one representative village was selected.
for collecting required information on modified semi-structured schedules through PRA.

The resource teams collected secondary data and related statistics needed for planning from different departments and other sources.

**Was information collected from Gram Sabha’s? Furnish information in the given table.**

Yes. Information from grass root level were collected, i.e. from Gram Panchayat level.

**If the information from Gram Shabha’s not collected:**

a) **What other consultative process (es) were followed in the plan preparation?** What is the extent to which inputs from sub-district level have contributed to the planning exercise? Here the factual position may be described.

N/A

b) **Whether agriculture planning units (APUs) at village, block/taluka and district level namely VAPU, BAPU and DAPU actually exist. If not, what other mechanism was used for preparation of C-DAP.**

It was reported that DAPU was formed and attempt was made to form VAPU and BAPU, but could not succeed due to certain circumstances. In order to prepare C-DAP, existing set up was used like ATMA etc.

<table>
<thead>
<tr>
<th>Name of District</th>
<th>No. of Blocks/Talukas</th>
<th>No. of Villages</th>
<th>No. of Gram Shabha’ s held</th>
<th>No. of Block/Taluka level meetings*</th>
<th>No. of District level meetings*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bikaner</td>
<td>5 (at Present 6)</td>
<td>Revenue villages 892, habitant villages 805</td>
<td>219</td>
<td>Several</td>
<td>Several</td>
</tr>
</tbody>
</table>

* Schedules of these meetings circulated/announced well in advance or not?

Meetings were conducted but not as pre schedules. It has to arranged as per the conveniences of officials from district to panchayat level through telephonic talks or other medium of communications.
Technical aspect of planning

1. Is Plan Comprehensive?

Parameters –

i) Is C-DAP based on the felt-needs of the farmers or not?
- Yes, to a large extent it is based on the felt needs of the farmers.

ii) Was a separate vision document prepared or not? If yes, was this vision reflected in C-DAP preparation in the form of vision statement or not?
- Yes, a separate vision document was prepared in a short and crisp manner.

Keeping in view the objectives and scope, suggested in the C-DAP Manual (P.8-10) of the Planning Commission, the vision statement starts with a preamble like, Bikaner District has animal husbandry based economy. With the arrival YIGNP in mid 1970’s and its well developed network of distribution facilitated the farmers of the district to start cultivating wheat, gram, mustard and groundnut in irrigated condition. As expected, the vision statement mentioned the future course of action to be taken by the stakeholders like, raising farm incomes on sustainable basis by integrating crop farming with animal husbandry through a system approach most suited in the prevailing agro-eco situations of the district/regions and resources available with the farmers. The crux of the approach should necessarily be a judicious use of available water – be in rearing crops, fodder, animals or any other enterprises. Again, the vision statement came out with a priority setting for the district. The entire district has been divided into two broad situations, i.e., (i) rain fed and (ii) irrigated. In both the situations, different priorities were made.

Priorities:

I. Rain fed:
   a. Sand dune stabilization and management
   b. Rainwater management (collection and conservation)
   c. Strengthening animal husbandry
   d. Fodder resource management (Private and common property resources)
   e. Organic farming and certification of organic produce
   f. Alternate land use: Planning waste land, and
g. Enhancement of crop production

II. Irrigated

a. Intensification of existing cropping system
b. Soil health management with special emphasis to increase water holding capacity
c. Crop diversification with special reference to high value low-input requiring crops
d. Inclusion of market oriented horticulture crops with existing cropping system
e. Enhancing water use efficiency through MIS (Minor Irrigation Scheme)
f. Integrated Nutrient Management (INM) and Integrated Pest Management (IPM)
g. Human resource development of farmers, rural youths, farm women, other disadvantaged groups and staff
h. Strengthening Public–Private Partnership (PPP) with special reference to specific agro products, and
i. Paradigm shift from production oriented farming to market oriented agriculture.

iii) Were all departments (agriculture and allied activities) involved in planning?
- Yes. From the report one can conclude that most of the line departments of agriculture and allied activities were involved in planning. After discussion with all departments, specific projects were proposed in the report.

iv) All agricultural and allied developmental activities being cared out in the district by governmental and non-governmental agencies, accommodated in the C-DAP or not? Provide following information:

<table>
<thead>
<tr>
<th>Name of District</th>
<th>No. of Govt. Schemes/Programs</th>
<th>Schemes/Programs referred in C-DAP</th>
<th>No. of Non-Govt. Schemes/Programs**</th>
<th>Schemes/Programs referred in C-DAP</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Central</td>
<td>State</td>
<td>LB</td>
<td>Central</td>
</tr>
<tr>
<td>Bikaner</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

** NGS1, NGS2, NGS3 refer to non government programs /schemes effectively being implemented in the district by agency like Bank, SHG or any other agency.

The Report has mentioned about 15 on going schemes and special projects/programs in the district. Of the total number of ongoing schemes, 4
schemes are in CSS, 7 are Central and 4 special projects sanctioned by SLSC, Jaipur. Over and above, there are various activities related with agriculture, undertaken by NREGS, though schemes names were not mentioned. It was told to AERC team that since ongoing schemes/activities are already covered under some schemes, they were not included in C-DAP.

v) Were efforts made to address a) emerging challenges from global trade and climate changes? b) Innovative approaches which can improve the livelihood and economic condition of the people in the area c) Priority areas as per agro – ecological situation.

The district plan is quite comprehensive. The plan is meant to achieve high productivity growth expectation through Rashtriya Krishi Vikas Yojana (RKVY). It is aimed at reducing the yield gaps in important crops and increasing production and productivity in agriculture and allied sectors through holistic approach to maximize farmer’s income. For the above mentioned purpose, specific projects were proposed in the report, for the attainment of 4% growth rate in agriculture sector.

Each project is meant to provide input to the growth in the specific area as extension activities alone can not sustain growth for long. There are 13 specific projects mentioned in the report for agriculture in Stream-I. These projects will provide support base to other growth oriented activities for long term issues along with activities catering to the immediate needs of the district.

The entire district has been divided into two broad situations. It was reported to the AERC team, that it is not possible to distinguished exact area on priority basis as there is a scarcity of rainfall in the entire district.

Projects:

Massive Seed Production Projects for achieving desired Seed Replacement Ratio (SRR). The crops taken under the project are, kharif bajra, moth and groundnut and rabi, wheat, gram and mustard. The present average yield of bajra, moth, groundnut, wheat, gram and mustard are 2.15, 2.32, 23, 23, 7.07 and 10 quintal per hectare respectively. The projected average yields for the above mentioned crops are 2.58, 2.78, 30, 32, 9 and 14 quintal per hectare
respectively. Thus the expected project outcome: good quality seed will increase crop yield which in turn will increase farmers income manifold.

(For total cost and other break ups see report pages 50, 51 and 127).

**Second Important Project;**

Farm fencing to check biotic stress.

**Goal:** to ensure and increase productivity and reduction in crop losses. The purpose is to save crop from stray animals. The estimated cost of farm fencing during the period 2007 to 2012 was expected to be Rs. 2700 lakhs and this in turn will help save crop loss upto 10-20 per cent.

Another Project, “Rainwater harvesting by transforming sand dunes as Catchment area”.

Bikaner district is dominated by sand dune and complex dune systems of varying heights and widths. The only cultivated area is inter dunal plain which lies in between the flat, leveled space left by the dunes. These dunes could be used for rainwater harvesting by making artificial catchment area by using polythene sheets on the dunes. In this way crop productivity can be increased even under adverse climatic situations of drought and famines.

The project estimated that an area of 50000 sq. meters can be developed with a cost of Rs. 114 lakhs. The project team also estimated that a digging of 7 lakh liter capacity can irrigate an additional area of 4 hectare of orchard by drip irrigation, providing an income of about 2.50 lakh per annum.

**Some other important proposed projects are:-**

(i) “Development of agri-horti culture system through Tank based water harvesting”.

This project is especially for rain fed areas. It has been estimated that one such Tank can irrigate half a hectare of vegetables or orchard through drip irrigation which can help farmer to earn about Rs. 30000 per annum.

(ii) “Sand dune stabilization for soil erosion control”.

It will indirectly help in stopping soil erosion and maintaining the fertility status of the soils.

The estimated budget requirement for the period 2007-2012 is Rs. 945 lakh. Farmers share is proposed to be 25% of the total cost.
(iii) “Dove-Tailing of Amulya neer Yojana with NREGS”.

Objectives:

i. To incentivize farmers to construct Diggis (Water Storage Tanks) on their farms.

ii. To increase the number of diggis in canal areas.

iii. To increase sown area under irrigated crops up to 10-15%

iv. To increase crop production.

Total budget requirement for the period 2007 to 2012–Rs. 250 lakhs.

Total units proposed–150 per year.

One digging of 4 lakh. liters capacity can irrigated 2 hectare of orchard with drip irrigation. It will provide an additional income of Rs. 1.25 lakh per year to the farmer.

These are some of the important projects (Proposed) mentioned in the report.

2. Capacity building of Planning Committees (PCs) and APUs and others involved in planning.

Parameters:

i. Number of trainings/workshops/meetings conducted for capacity building of the planning units. Provide details.

The report mentions about a special meeting under the Chairmanship of District Collector held on 14-10-2008. All the line departmental heads of the offices and officials along with PRI (Panchayat Raj Institution) representatives participated in this meeting. In the meeting different aspects were discussed for developing and recommending Comprehensive District Agriculture Plan (C-DAP). However, an interaction workshop with officials of the department of agriculture, allied departments and resource team members was organized on 23-08-2008 at CAZRI, RRS, Bikaner to appraise all the stakeholders with the aim and the objectives of C-DAP. Also, a one day workshop was organized on 1-09-2008 at Panchayat Samiti, Bikaner to share ideas of C-DAP vis-à-vis agricultural development with the district planning committee (DPC) members to seek their cooperation in preparation of village and Panchayat level planning. Other than the above mentioned meetings, there are indications of meetings held at different levels from time to time.
ii. Material for No. (i) Prepared and distributed or not? If yes, enclose specimens.
No. Material was not prepared and distributed.
iii. Has plan plus or any other software being used to facilitate planning or not?
Plan plus or any other software were not used in the report.

3. Data Collection and Analysis for Planning (Quantity and Quality of data)
   Parameters of data collection –
   i. Sources
   (a) Name the sources:
      The task of collecting village wise data of the district was entrusted to five NGOs, through open NIT. The names of the NGOs have not been mentioned in the report. As per the report, the NGO teams after receiving proper training from TSI collected the data on per-structured formats. The data was collected after wide consultations with farmers/farmer groups as well as Gram Panchayat level workers from the relevant fields.

      Resource teams also conducted in-depth farm/village level study covering important aspects of agriculture and allied fields. For this, the district was divided into two distinctively, Agro-Eco-Situations (AESs) as was done for Strategic Research and Extension Plan (SERP) preparation under ATMA (Agriculture Technology Management) Agency Scheme. From each AES one representative village (Sansardesar from AES-I and Taant from AES-II) was selected for collecting required information on modified semi-structured scheduled through PRA (Participatory Rural Appraisal).

      The primary as well as secondary data collection was cross-checked through triangulations and verified from information/reports available with different government departments and PRA based exercises (earlier conducted by different agencies). The District Annual Plan (draft), SREP and PLP (Potential Linked Credit Plan) of Bikaner district and other related documents/reports of different department were consulted for preparing the C-DAP.
(b) Give suggestions for improving the data sources.

Invariably mention the source and reference year of the data (secondary)

ii. Quantity and quality of data satisfactory or not? If not, what more data was needed? How the quality of data can be improved?

Report is comprehensive and well written by itself. The report has not followed the C-DAP manual, Planning Commission in all respect. Many of the manual tables (1-78) are not taken into account. viz: table Nos: 3, 5 to 7, 11 to 17, 19 to 25, 27 to 36, 38 to 56, and 58 to 78, either not given or some of them are given in different format. Tasks relating to credit institutions, credit disbursement and insurance status (Tables 7 to 40), except Table 37, (report Table No. 2.9), no other tables has been given. Again tables like Land Capacity Classification, Soil Fertility Indices, Micronutrient Status, Reclamation and Development of Saline/Alkali Soils, Water Analysis Report, Information of Natural Calamities, Farm Level Storage Plan, Taluka wise Yield Gap Analysis to mentions few of them has not been accounted for.

4. Parameters of data analysis --
   i. SWOT analysis of LB/District done thoroughly or not? (It should be of the district and not the individual activities)

   SWOT analysis of the district done in a comprehensive manner and is a well written text (Pages 27–29 of the report)

   The report prepared SWOT analysis sector-wise. The sectors are:-

   Management of Agriculture Crops, Management of Horticulture Production, and Management of Natural Resources. To highlight the main findings (in brief) one can say that the major crops of district Bikaner are bajra, moth, guar, gram, and mustard. The productivity of many irrigated crops seems to be plateaued during the last one decade. Rain fed crops becoming more risky. Cow, ship, goat and poultry (backyard) are major component of animal husbandry in the district.

   Though the buffalo populations in increasing yet cows are still popular amongst farmers. SWOT analysis reveals the need and potential of implementing different extension activities and need based projects to achieve the vision for the district.
ii. Block data to explain spatial disparities/variability of the district given or not?

Partly given. Some data have not been presented block-wise as per C-DAP manual Planning Commission, GOI.

The Commission has categorized the land-holding farmers into five categories namely, marginal farmers, small farmers, semi-medium farmers, medium farmers and large farmers. The Bikaner report has dealt with only three categories namely, marginal, small and large. No explanation has been given why the other two farm groups are not included. It was reported by the officials to AERC team that looking into the local conditions, land holding size was categorized. Besides mostly farmers of this district are large farmers.

Some other information (data) have not been presented block-wise namely, land capability classification, number of self help groups (SHGs), micro nutrients status, group wise area and production, etc.

iii. Gaps for important variables worked out or not?

Yes. Block-wise yield gap analysis of major crops has been worked out in the report (Page 44).

iv. Trends from the data collected for important variables like land use parameters, agro-based industry, production, productivity, population, population growth and migration, employment opportunities, etc. taken into account or not?

Data regarding land use, agro based industries, agriculture production, productivity and population are given. The data on population growth, migration and employment opportunities are not given and therefore emerging trends from these data were not analyzed. However, physical and financial program proposed for development of agriculture under C-DAP during XI Plan for both Stream-I and II have been taken into account.

v. Summary tables prepared or not for discussions to synthesize needs/problems/potentials in a participatory mode?

Summary tables prepared for discussions to synthesize needs/problems/potentials in a participatory mode.
vi. Base maps and district profile given or not? Are these adequate?
Maps of the district (General) given. Other maps suggested in Planning Commission Manual have not been given. (Annexure V)

5. Synthesis of needs, problems, and potentials
These are required to draw important interventions needed for planning in a participatory manner.
This is reflected in the various development programs suggested for agriculture and allied activities.

Parameters
Needs/problems/potentials were synthesized taking into account the following or not?

a. SWOT analysis of the district
   - SWOT analysis is quite satisfactory.

b. Inputs from Gram Sabhas
   - Seems that most of the inputs are from Gram Panchayats.

c. Detailed analysis of the data
   - Partial analysis of the data was possible as many block-wise data, as per C-DAP manual not given. It was reported that it is difficult to prepare block wise data for all the aspects.

d. List of these needs/problems/potentials given or not?
   - Most of the needs/problems/potentials were spelt out in the report.

e. Has prioritization of needs been done or not? Give the list of prioritized needs.
   - A number of useful projects have been suggested but prioritization of needs has not been suggested. General prioritizations for the district prepared and priority setting for the district is given in the report.

6. Study of ongoing programs in the area
Parameters –

i. Were on-going programs and schemes been studied or not?
   - The central/state’s ongoing projects have been mentioned in the report.
   - The details of the schemes being run in the district are.
<table>
<thead>
<tr>
<th>Sr.No.</th>
<th>Name of the Scheme</th>
<th>Sector</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>AGRICULTURE</strong></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Work Plan</td>
<td>CSS</td>
</tr>
<tr>
<td>2</td>
<td>Integrated Scheme of Oil Seeds, Pulses, Oil Palm and Maize (ISOPOM)</td>
<td>CSS</td>
</tr>
<tr>
<td>3</td>
<td>Mini Mission-II of Technology Mission of Cotton (MM-II of THC)</td>
<td>CSS</td>
</tr>
<tr>
<td>4</td>
<td>Agriculture Technology Management Agency</td>
<td>Central</td>
</tr>
<tr>
<td>5</td>
<td>National Food Security Mission (Wheat)</td>
<td>Central</td>
</tr>
<tr>
<td>6</td>
<td>National Food Security Mission (Pulses)</td>
<td>Central</td>
</tr>
<tr>
<td>7</td>
<td>Horticulture Development Programme (HDP) Under RKVY</td>
<td>Central</td>
</tr>
<tr>
<td>8</td>
<td>Micro irrigation scheme</td>
<td>CSS</td>
</tr>
<tr>
<td>9</td>
<td>Rashtriya Krishi Vikas Yojana/NADP</td>
<td>Central</td>
</tr>
<tr>
<td></td>
<td><strong>KRISHI VIGYANA KENDRA</strong></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Farmers/field staff training and other extension activities</td>
<td>Central</td>
</tr>
<tr>
<td>2</td>
<td>Conducting FLDs, OFTs and adaptive trails</td>
<td>Central</td>
</tr>
<tr>
<td></td>
<td><strong>HORTICULTURE</strong></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Horticulture Development Programme (HDP) Under RKVY</td>
<td>Central</td>
</tr>
<tr>
<td>2</td>
<td>Micro Irrigation Scheme</td>
<td>CSS</td>
</tr>
<tr>
<td></td>
<td><strong>ANIMAL HUSBANDRY</strong></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>On-going extension &amp; development programmers</td>
<td>CSS</td>
</tr>
</tbody>
</table>

In addition to the above mentioned on-going schemes/projects, various new projects under RKVY have been sanctioned by SLSC, Jaipur which will be implemented in coming years. The projects sanctioned for district Bikaner are given on page 89 of the report – (there are 13 projects in all).

**ii. How many needs, problems, potentials and solution interventions have been addressed through on-going programs/schemes?**
- Stream II indicates on going schemes and details on needs and potential is given in tables 4.24 to 4.33

**iii. How many funds were available from on-going programs? Were these converged to formulate C-DAP or not?**
- Funds available from ongoing programs were Rs. 871.03 lakh. Yes, funds were converged to formulate C-DAP.

**7. Formulation of projects in C-DAP**
Parameters
i. Were the projects and works identified on the bases of: a) Prioritized needs, b) benefits expected, c) expenditure involved, and d) availability of needed material or infrastructure taken into account

From report it seems that the projects and works were identified on the basis of needs. Expected benefits were also shown. Expected expenditure to be made during XI Plan is shown year-wise from 2007-08 to 2011-12 for both stream I and stream II items. Instead of taking into account the quantum of work to be done in each year, the expenditure shown for each year in a uniform fashion. Hence, in all probability other relevant factors, availability of material and infrastructure are not taken into account while suggesting year-wise break-ups of expenditure. Looking into inflation and other relevant factors, these tables need to be revised.

ii. Was the decision logistics in deciding projects and works improved by discussion with the planning committee or not? (This ensures participation at various levels of C-DAP preparation)

(a) Yes. The decision was logistics in deciding projects and works was improved by discussions with the planning committee.

(b) All the departmental heads of the offices and officials along with PRI representative participated in the meeting held under chairmanship of District Collector. A detailed discussion was carried out on the points like farmers’ participation, gaps in productivity etc. Also workshops were organized with the officials of the department of agriculture, allied department and resource team members to apprise all the stakeholders about C-DAP. Also information from reports available from different department and PRA based exercise (earlier conducted by different agencies), the district annual plan, and from other related reports were consulted for C-DAP.

8. In a number of district plans so far received, the procedure followed (in the plan preparation) is not clear. As a result some of the issues will become difficult to review. Therefore, the planning units may be advised to include one
chapter/section describing methodology of preparing C-DAPs with the following details.

i) Sources of data—official documents, sample surveys, Rapid Rural Appraisal (RRA), Participatory Rural Appraisal (PRA), case-study method or any other method followed.
- The task of collecting village wise primary data of the district was entrusted to five NGO teams, after receiving proper training from TSI, collected the data on pre structured formats. The data was collected with wide consultations with farmers/farmer groups as well as Gram Panchayat level workers of the relevant fields. Formal and informal meetings with staff of agriculture and line departments, members of Panchayati Raj Institutions and farmers were conducted at different levels.
  The resource teams also collected secondary data and related statistics needed for planning from different departments and published resources.

ii) Technical methodology followed in arriving at the cost estimates of the proposed projects in the plan or at least a reference to the respective DPR’s.
- For all the proposed projects, the total cost along with sector-wise cost is given in a simple tabular form. Also project out-come has also been mentioned.

iii) Description of the consultative processes followed. Details of the procedure followed in village level, block level, and district level consultations may be provided. A copy of the village and block level schedules canvassed, if any, may also be included.
- Explained earlier (in 8(i)).

iv) A scheme of convergence (functional and convergence) among the existing programs /schemes.
- It has been done.

v) Any other detail important to preparation of C-DAP
- Explained earlier.
9. Program delivery spelt out or not? A table showing Name of department, project/works/activities entrusted to each department and funds provided are shown in C-DAP or not?

Year-wise physical and financial target for various activities have been provided. Though the report is well written, it has not taken into account many of the tables (1-78) of the C-DAP manual of Planning Commission, namely Table no. 6, 12, 57,58,59,62 etc. to name few of them.

10. Monitoring and evaluation mechanism suggested or not?

Yes. Some suggestions are given on monitoring and evaluation mechanism.

11. Others

Awareness about this planning initiate was found among the concerned officials of agriculture and allied department, State agricultural university, Central Arid Zone Research Institute and NGOs. Farmers were also aware about the on going schemes. It was reported by the officials that department should be given sufficient time to create more awareness among concerned people.

General Observations:

Overall the report is satisfactory and C-DAP team has done a lot of hard work with keen interest to prepare this useful report. Their efforts are reflected in this good report. According to them looking into the local situation, it was not possible and relevant to give all the tables as per planning commission manual. It was their suggestion that this manual and table forms should be reviewed and revised as per area specific conditions. Area team under District Collector should have discussion with experts and finalize the formats.

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