ASSESSMENT OF TEAM PERFORMANCE AS PERCEIVED BY TRIBAL FARMERS IN CASHEW ORCHARD DEVELOPMENT PROGRAM IN INDIA

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Abstract
Team Performance is the key factor for success or failure of any organization. Effective Team performance leads to maximum goal or target achievement. Shifting cultivation in sloppy hills is the major activity of tribal farmers in the tribal zone of Andhra Pradesh, India for food security, but this activity leads to lot of environmental problems in the tribal zone. The income to the tribal farmers from the shifting cultivation is also low and not sufficient to maintain their families throughout the year. Hence the initiation of Cashew Orchard Development Program to curb the shifting cultivation and increase the income levels of tribal farmers. This study assessed the team performance in Cashew Orchard Development Program as perceived by the tribal farmers in Vizianagaram district of Andhra Pradesh, India and the relationship of profile characteristics of tribal farmers with team performance. A random sample of 250 tribal farmers in the Vizianagaram district of Andhra Pradesh, India responded to a two – section survey instrument. Data was collected by personal interview method. Findings indicated that the tribal farmers perceived the team performance as good and further analysis of overall mean it was found that the role delivery by Farm Science Centre got highest. The profile characteristics like education, social participation, extension contact, mass media exposure, risk orientation and economic motivation had positive relationship with team performance.

Introduction
The success or failure of any Government, Organization, Institution, Project, Agency and any Developmental Program is largely dependent on the performance of its team. Effective team performance leads to high organizational performance and maximum goal or target achievement. The crucial and important factor for effective team performance is the formation of team by and with like minded individuals to achieve the goal or target. Technically cohesive group achieves maximum goal or target in planned time. Generally the team performance is measured in terms of team plan, individual member performance, individual goals aligned with organizational goals, performance expectations, desired expectations, team participation, team communication, team cooperation and coordination and other factors with the help of self responses of team members, so this may have considerable bias in assessment of their own team performance. A
few research studies were conducted to assess the team performance by the target group or clientele or beneficiaries or customers. This methodology will help in elimination of bias, assessing the real and actual performance of team and achievement of goals or targets. Individual tasks within the teams may be sufficiently delineated so that individual performance may, to some extent, be evaluated (Michael, et al, 1977).

Shifting cultivation is one of the main practices of tribal farmers who habituated to live in the forests. The tribal farmers who have no land of their own are prone to take up mixed cropping in the sloppy lands of hills by cutting the forest trees thus causing the fast deterioration of forest wealth leads to environmental changes in those region. Mixed cropping in sloppy hills is not only tedious but also leads to low income to the tribal farmers due to poor yields (Rao, 2004). Mixed cropping of tribal farmers is a typical type of farming where in tribal farmers used to mix 4 or 5 different crop seeds and broadcast on the sloppy lands after one or two showers during rainy season. Generally, the crops include Redgram, Cowpea, Foxtail Millet, Sorghum, Bajra and Maize. The tribal farmers do no adopt the practices of line sowing, fertilization and Plant Protection in the mixed cropping thus leads to poor yields and the income not sufficient to feed the entire family throughout the year.

A critical examination of soil type, weather parameters of the region economic conditions of tribal farmers, the Cashew cultivation on the sloppy lands is the best option to curb the practice of shifting cultivation by the tribal farmers and it also gives stable income to the tribal farmers (Swamy and Rao, 2001).

**Cashew Orchard Development Program**

The Integrated Tribal Development Agency (ITDA) is the nodal agency in the tribal regions for implementing the various developmental programs in the areas of Agriculture, Education, Health etc. for upliftment of tribal population. As per the Policy Decision of ITDA (ITDA Policy, 1995) cutting or clearing of forest trees was banned and the culprits will be punished as per law. Inspite of Policy decision, the tribals did not stop the shifting cultivation in the forest lands because of lack of suitable alternative for living. At this stage the ITDA pursued the Farm Science Centre of State Agriculture University for the best sustainable alternative for the tribal farmers for living. Thus it paved the way for initiation of Cashew Orchard Development Program to curb the shifting cultivation in the tribal region of Andhra Pradesh, India.

**The Cashew Orchard Development Team**

A Three tier system of Team of 64 members viz; Seven Officials from ITDA, Seven Scientists from Farm Science Centre (FSC) of State Agricultural University and 50 tribal farmers from 50 Village Tribal Development Associations (VTDA) of the region was formed to curb the shifting cultivation and development of Cashew Orchards in the hill sloppy lands of tribal farmers for their economic upliftment and also for better environment in the zone.

The Roles of three wings i.e. ITDA, Farm Science Centre (FSC) and VTDAs were thoroughly discussed and assigned separately to each organization as follows.

**ITDA’s roles**

1. Team leadership
2. Guidance in Selection of Villages & Sites
3. Financing
4. Timely release of budget
5. Supervision
6. Monitoring
7. Supply of inputs
8. Documentation

Farm Science Centre’s roles
1. Planning the activities
2. Capacity building of VTDA members
3. Capacity building of Tribal Farmers
4. Allocation of inputs to each village
5. Monitoring of recommended practices of cashew cultivation
6. Assessment of survival percentage of cashew seedlings
7. Assessment of pest and disease problem
8. Documentation of feed back from the farmers
9. Reporting to the ITDA about different activities
10. Overall technical supervision of orchards.

VTDA’s roles
1. Creating awareness about the disadvantages of shifting cultivation and advantages of cashew cultivation
2. Selection and preparation of farmers list
3. Motivating the selected tribal farmers of the village
4. Assessment of the quantity of the inputs
5. Delivering of inputs to the farmers
6. Regular technical guidance to the farmers
7. Periodical reporting of survival percentage of cashew seeding survival
8. Responsibility of gap filling in the orchards

The Cashew Orchard Development Program in Vizianagaram District of Andhra Pradesh State in India was started in 2002 with the preparatory activities like selection of Villages, farmers, actual lands for cashew cultivation, land preparation, digging of pits, preparation of pits for planting. The actual planting was done in the rainy season and also gap filling if any, care & maintenance of seedlings, fertilization and plant protection till the end of year 2003. The actual target fixed by Team during the year 2003-2004 was 1000 acres and yet no comprehensive assessment has been made relative to the promotion of cashew cultivation in the tribal region. The results of this study especially on the assessment of the team performance as perceived by the tribal beneficiaries in Cashew Orchard Development Program will provide the basis for corrections if any in the program and also for better promotion of cashew orchards in hill sloppy lands of tribal area.

Purpose and Objectives
The primary purpose of this study was to assess the team performance as perceived by the tribal farmers in Cashew Orchard Development Program in India. Objectives of the Study were to:
1. Find out socio-economic, psychological and demographic characteristics of tribal farmers of Cashew Orchard Development Program,
2. Assess the Team performance in Cashew Orchard Development Program in the Tribal Province as perceived by the tribal farmers; and
3. Determine relationships, if any, between the socio-economic, psychological and demographic characteristics and the perception of team tribal farmers.

**Methods/Procedures**

**Research Design**

The Ex post facto research design was adopted based on the objectives of the Study. According to Kerlinger (1973), Ex Post facto research is a systematic empirical enquiry in which the scientists do not have direct control of influencing variables (independent) because their manifestations have already occurred or because they are inherently not manipulative. Since the variables chosen for the study have already been occurred, this research design was made use of in this study.

**Population and Sample**

The study was conducted purposively in High Altitude and Tribal zone of Vizianagaram district of Andhra Pradesh in India and the population for this study consisted of 1000 tribal farmers of Cashew Orchard Development Program who were taken up the cashew cultivation in 50 villages where shifting cultivation is in vogue. Out of which a total of 250 farmers i.e. five farmers from each village were selected based on random sampling method by using random numbers on the basis of list of all the tribal farmers who adopted cashew cultivation.

**Survey Instrument**

A Two-section survey instrument was developed to collect data. First Section consisted of thirteen (13) Socio-economic, psychological and demographic characteristics like age, sex, education, family size, material possession, farm size, farming experience, social participation, extension contact, mass media exposure, risk orientation, economic motivation and scientific orientation and the second section included the ten factors related to Team performance which were selected based on the opinion of the experts of State Agricultural University, Cashew Research Station, State Department of Horticulture and the extension personnel working in the tribal zone. The ten factors of team performance viz; problem understanding, attitude, commitment, participation, communication, coordination, cooperation, motivation, skills, professionalism and role delivery were measured with the help of a total of 76 statements on Five-point scale that ranged from 1 = strongly disagree to 5 = Strongly agree for positive statement and the scoring is reverse for negative statement.

The face and content validity was established using a panel of experts which comprised of State Agricultural University, Integrated Tribal Development Agency, Agricultural Research Station, State Department of Horticulture located in the Tribal zone. The translated version of the interview schedule from English language to the Telugu language was made possible by the scientists of Farm Science Centre and extension personnel of Integrated Tribal Development Agency, Parvatipuram.
Pre testing of the instrument

The instrument thus developed was pilot tested in Tribal zone of Vizianagaram district using 50 tribal farmers those who were not part of the study and also tested for reliability using test and retest method. The reliability coefficients of the instrument was found to be 0.91. Based on the responses obtained in pre testing, appropriate changes were made duly avoiding ambiguous and irrelavant items.

Data Collection and Analysis

The tribal farmers were interviewed individually by the investigator during April, May months of 2004 and the responses of each respondent were recorded in the interview schedule. Data for this study was collected from 250 tribal farmers and analyzed using statistical test Viz measures of central tendency and Correlation Coefficient.

The total assessment score as perceived by the tribal farmers towards team performance was obtained by adding the score of all 76 statements of different factors in the instrument thus the score range was 76 to 380 and it was grouped into four categories viz: Poor (76-152), Average (153-228), Good (229-304) and Best (305-380) based on equal class intervals.

Results

Objective 1: Profile of Tribal Farmers

Majority of the respondents were male (72%) and the remaining were female (28%) majority of them were aged (67%). The sample dominated by illiterates (76%) having small (<2 ha) farm size (82%), majority of them were having medium social participation (65%) and 56% of them having more than 20 years of farm experience. The sample was dominated by 75% low annual income farmers i.e. <Rs. 11,000 per annum. Sixty one per cent of tribal farmers were having medium extension contact and urban contact. The other characteristics like Scientific Orientation and risk orientation were found to be low i.e. 78% and 83% respectively.

Objective 2: Assessment of Team Performance in Cashew Orchard Development Program as perceived by the tribal farmers.

The total Assessment score as perceived by the tribal farmers towards team performance was obtained by adding the score of all 76 statements of different factors on Five point scale and grouped into four categories as in Table 1.

Table 1. Team Performance Categories as perceived by the tribal farmers in Cashew Orchard Development Program (n = 250).

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Category</th>
<th>Score Range</th>
<th>F</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Poor</td>
<td>76-152</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>2</td>
<td>Average</td>
<td>153-228</td>
<td>20</td>
<td>8.00</td>
</tr>
<tr>
<td>3</td>
<td>Good</td>
<td>229-304</td>
<td>198</td>
<td>79.2</td>
</tr>
<tr>
<td>4</td>
<td>Best</td>
<td>305-380</td>
<td>32</td>
<td>12.8</td>
</tr>
</tbody>
</table>

A good look at Table 1 revealed that a large majority i.e. 79.2 per cent of tribal farmers assessed the performance of the team of Cashew Orchard Development Program was ‘Good Performance’, whereas 12.8 per cent of them assessed as ‘Best Performance’ the remaining were assessed as ‘Average Performance’ and none perceived as ‘Poor performance’. Overall, the tribal
farmers of Cashew Orchard Development Program have a positive assessment towards the team performance and another positive aspect was that none of them reported as poor performance. This clearly shows that the team is having clear problem understating, positive attitude, Job Commitment, good coordination and cooperation, effective communication, professionalism and efficient role delivery in Cashew Orchard Development Program. This study also further analyzed critically all the means of different factors of team performance selected for the study and presented in Table 2.

### Table 2. Assessment of factors of Team Performance in Cashew Orchard Development Program by Tribal farmers (n = 250).

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Factor</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Problem Understanding</td>
<td>4.44</td>
<td>0.71</td>
</tr>
<tr>
<td>2</td>
<td>Attitude</td>
<td>4.49</td>
<td>0.68</td>
</tr>
<tr>
<td>3</td>
<td>Commitment</td>
<td>4.48</td>
<td>0.61</td>
</tr>
<tr>
<td>4</td>
<td>Participation in Village activities</td>
<td>3.98</td>
<td>0.52</td>
</tr>
<tr>
<td>5</td>
<td>Communication</td>
<td>4.46</td>
<td>0.63</td>
</tr>
<tr>
<td>6</td>
<td>Coordination</td>
<td>4.17</td>
<td>0.61</td>
</tr>
<tr>
<td>7</td>
<td>Cooperation</td>
<td>4.39</td>
<td>0.67</td>
</tr>
<tr>
<td>8</td>
<td>Motivation Skills</td>
<td>4.38</td>
<td>0.64</td>
</tr>
<tr>
<td>9</td>
<td>Professionalism</td>
<td>4.45</td>
<td>0.73</td>
</tr>
<tr>
<td>10</td>
<td>Role delivery</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>a) ITDA</td>
<td>4.11</td>
<td>0.69</td>
</tr>
<tr>
<td></td>
<td>b) FSC</td>
<td>4.56</td>
<td>0.60</td>
</tr>
<tr>
<td></td>
<td>c) VTDA</td>
<td>4.29</td>
<td>0.59</td>
</tr>
</tbody>
</table>

A perusal of Table 2 with regard to the analysis of overall mean of each factor of team performance as perceived by the tribal farmers revealed that the role delivery by Farm Science Centre of the State Agricultural University has got highest overall mean (M = 4.56; SD = 0.60) followed by Team attitude (M = 4.49; SD = 0.68), Team Commitment (M = 4.48; SD = 0.61), Team Communication (M = 0.44; SD = 0.63), Team Professionalism (M = 4.45; SD = 0.73), Problem understanding (M = 4.44; SD = 0.71), Team Cooperation (M = 4.39; SD = 0.67), Motivation Skills (M = 4.38; SD = 0.64), Role delivery by VTDAs (M = 4.29; SD = 0.59), Team Coordination (M = 4.17; SD = 0.61), Role delivery by ITDA (M = 4.11; SD = 0.69) and participation in Village activities (M = 3.98; SD = 0.52). Almost all the factors of team performance except participation in village activities were rated above four indicating that they “Agreed” with the factors of team in Cashew Orchard Development Program.

**Objective 3: Relationship of Team Performance with profile characteristics of the tribal farmers**

The relationship between the profile characteristics of tribal farmers and perception of team performance was studied and the data presented in Table 3.

It is evident from Table 3 that out of thirteen, only six characteristics of tribal farmers viz Education, Social participation, Extension contact, Mass media exposure, Risk orientation and Economic motivation were found to have significant relationship with the perception of team performance.
performance in Cashew Orchard Development Program and the remaining seven variables were found non significant.

Table 3. Relationship of Team Performance with profile characteristics of the tribal farmers of Cashew Orchard Development Program.

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Profile characteristics</th>
<th>Significant ‘r’ value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Education</td>
<td>0.5620</td>
</tr>
<tr>
<td>2</td>
<td>Social participation</td>
<td>0.4510</td>
</tr>
<tr>
<td>3</td>
<td>Extension contact</td>
<td>0.5650</td>
</tr>
<tr>
<td>4</td>
<td>Mass media exposure</td>
<td>0.4310</td>
</tr>
<tr>
<td>5</td>
<td>Risk orientation</td>
<td>0.4980</td>
</tr>
<tr>
<td>6</td>
<td>Economic motivation</td>
<td>0.4260</td>
</tr>
</tbody>
</table>

Conclusions and Recommendations

Based on the results of the study, the following conclusions and recommendation are offered:

1. The team performance in Cashew Orchard Development Program was rated as Good Performance by the tribal farmers of the tribal zone. Furthermore, the findings also revealed that the tribal farmers positively agreed to various factors of team performance and it shows that the team maintained good linkage and strong contacts with tribal farmers for success of Cashew Orchard Development Program. However the tribal farmers somewhat agreed with regard to Team participation in village activities which are not related to Cashew Orchard Development Program.

2. It is recommended that lot of scope is there to achieve the Best Performance if the team members could consider the low mean factors of team performance as weak areas or deficit areas for improvement in next generation activities of Cashew Orchard Development Program. The Team could have won the tribal farmers confidence by participating more in the Village activities like festivals, functions, dispute settlements etc. With regard role delivery, the ITDA and VTDAs have to stick to the actual planning and exert more towards success of Cashew Orchard Development Program which was observed in the role delivery by Farm Science Centre of State Agricultural University. Particularly the VTDAs have to plan well in advance to supply various inputs like grafts, fertilizers, plant protection chemicals and agricultural implements to the tribal farmers to create sustained interest and confidence of tribal farmers for success of the program. The ITDA should provide adequate financial support to the VTDAs engaged in Cashew Cultivation Development Program for purchase of various inputs to the tribal farmers.

3. It is recommended that the further selection of tribal farmers should be based on the different characteristics which were having significant relationship with the team performance which will help in achieving the target and success of Cashew Orchard Development Program. Further the Team has to arrange exposure visits to other areas of Tribal zone where the program was successfully implemented and this will help in motivating the tribal farmers to adopt the Cashew Orchard in the sloppy lands to curb the shifting cultivation.

4. Finally, findings from this study be shared with all stakeholders involved in the Cashew Orchard Development Program in the tribal zone of Andhra Pradesh, India. In addition, this study should be replicated in other tribal zones of India to assess the Cashew Orchard
Development Program in order to provide justification for programmatic improvements and allocation of resources.

**Educational Importance**

- Teams should be formed with the combination of Government Officials, Scientists, Village level institutions and farmers for effective collaboration and Team Performance.
- Research to find out the perceived attributes of clientele/customer/beneficiaries towards team performance of any program or activity can be given top priority in planned change.
- A policy for implementation of Cashew Orchard Development Program in other tribal zones of the Country where shifting cultivation is in vogue is given prime importance.

**References**