

Socio-personal Characteristic and Constraints Faced by Migrated *siddi*tribal Farmers in Adoption of Innovations

Girish Deshmukh*, Sujata Parmar, Bhishman Sangada and Smit Lende

ABSTRACT: The tribal farmers mostly use traditional methods in their agriculture, they are habituated to use same method year over year. Modern technologies like hybrid seeds, insecticides, fertilizers, improved implement etc. are rarely used by them. Because of these reasons, they are not able to get expected agricultural production.

The present investigation was undertaken in Junagadh district and Gir Somnath district where Afro-Indian migrated Siddi tribal farmers are settled here for their daily earnings. Also which is operational area of Junagadh agricultural university, Junagadh of Gujarat state. In the present investigation respondents were selected on strong purposive basis like respondents were only Afro-Indian migrated Siddi tribal farmers only. 180 farmers selected from different 27 villages from 02 different districts. The names of farmers got from panchayat, President of Afro-Indian migrated Siddi tribal community, Junagadh and President of Gir Somnath district adivasi vikas parishad, Gir Somnath.

INTRODUCTION

Agriculture has been and will continue to be the life line of the Indian economy. As the largest private enterprise in India, agriculture contributes to nearly one fifth of the national gross domestic product (GDP), sustains livelihood of about two third of population and provides employment to fifty-two per cent of country's work force and is the back bone of agro-based industry (Mangala Rai, 2004). Agriculture is the mainstay of our economy, a way of life for millions of farm families. Land is a primary source of livelihood and a critical factor that shapes the livelihood strategies and resultant outcomes.

Majority of the rural families are dependent on agriculture for their livelihood. However, due to denudation of natural resources, sub division of their land holdings and fluctuations in climatic conditions, the income from agriculture has been dwindling steadily. Furthermore, introduction of new technologies and farming practices have given tremendous benefits to resourceful and educated farmers on one hand, while depriving the small land holders of such benefits on the other hand.

The selected migrated Afro-Indian *Siddi* tribal farmers are African by origin, Indian by nationality

with Gujarati by speech. The *Siddis* are not part of the original Negritos of India. They are descendants of Africans from North-East and East Africa who were brought to India as slaves, soldiers or servants. Their faces are painted in shades of red, blue and green with designs symbolizing traditional African body art, they wear bright orange tiger print skirts, straw caps and breathe fire. We are not talking about a circus troop, but of the *Siddi* tribe who done different *avatars* at different times of the day. They have completed 300 years and this is their fourth generation in Gujarat.

RESEARCH METHODOLOGY

Gujarat is one of major tribal farmer's states of our country. In the state, it is chiefly grown by socioeconomically poor tribal farmers. To see the impact of agricultural university on local tribal farmers the study conducted.

Girgadhda, Kodinar, Talala, Una, Veraval talukas were selected from Gir Somnath district where Junagadh taluka itself selected from Junagadh district. Total 27 villages selected from 6 taluka.

In the present investigation respondents were selected on strong purposive basis like respondents were only Afro-Indian migrated *Siddi* tribal farmers only. 180 farmers selected from different 27 villages

^{*} Department of Agricultural Extension, Junagadh Agricultural University, Junagadh, Gujarat, India, E-mail: 251girish@gmail.com

from 02 different districts. The names of farmers got from panchayat, President of Afro-Indian migrated *Siddi* tribal community, Junagadh and President of Gir Somnath district adivasi vikas parishad, Gir Somnath.

This study was concerned with consequences of innovations generated by Junagadh agricultural university, Junagadh. "*Ex-post Facto*" research design used for this study. Kerlinger (1976) stated that "*Expost Facto*" design is worthy to apply when the independent variable has already acted upon.

MEASUREMENT OF SOCIO-PERSONAL CHARACTERISTICS

Age

Age of the farmers was operationalised as the number of completed years at the time of interview. Age is an important factor, which plays significant role in knowledge and adoption of recommended technology of farmers. The respondents were classified into three categories:

| Sr. No. | Category | Score |
|---------|------------------------------|-------|
| 1 | Young age (20 to 39 years) | 1 |
| 2 | Middle age (40 to 59 years) | 2 |
| 3 | Old age (60 and above years) | 3 |

Education

It refers to the number of years of formal education completed by the farmers. One score was given to each formal level of education of the respondent. The maximum scoring followed for each level of formal education was as under:

| Sr. No. | Level of education | Score |
|---------|----------------------------|-------|
| 1 | Illiterate | 1 |
| 2 | Up to primary education | 2 |
| 3 | Secondary education and | 3 |
| 4 | Higher secondary education | 4 |
| 5 | Graduate or above | 5 |

Measurement of Constraints

The respondents were requested to give importance to the constraints faced by tribal farmers in adoption of innovations. Frequency and percentage for each constraint were calculated and on that basis of that, the constraints were ranked.

RESULTS AND DISCUSSION

Socio-personal Characteristic

On the basis of extensive review of literature and discussions with the experts, some important

personal, social, economic, communicational and psychological characters have been selected in present study. The data of these characteristics were analyzed and presented in the following subsequent pages with an object to draw a general picture of farmers.

Age

Age is the natural phenomena going on in the life of every individual human being. The age plays a crucial role in the behaviour of every individual. The farmers were asked to indicate their age in complete years and the age of respondents was grouped as (i) Young age group (20-39 years) (ii) Middle age group (40-59 years) and (iii) Old age group (60 & above years). The data in respect of age of the respondents are presented in table 1.1 and depicted in figure 1.1

 Table 1.1

 Distribution of the tribal respondents according to age (n=180)

| _ | | 、 , | | |
|-----|------------------------|-------|-----------|----------|
| SN. | Age group | | Frequency | Per cent |
| 1. | Young (20-39 years) |) | 55 | 30.55 |
| 2. | Middle (40-59 years) | | 97 | 53.88 |
| 3. | Old (60 & above years) | | 28 | 15.55 |
| Mea | n: 2.28 & SD: 0.58 | Total | 180 | 100.00 |
| | | | | |

The data presented in table 1.1 indicated that more than half (53.88 per cent) of the respondents belong to middle age group followed by nearly one-third (30.55 per cent) respondents belong to young age group and very less (15.55 per cent) belong to old age group. From the above data, it can be concluded that majority of the respondents belonged to middle age group and being responsible for maintaining their families as well as farms along with social responsibilities.



gure 1.1: Distribution of the tribal responder according to age

Education

Education is essential for bringing desirable changes in human behaviour. Formal educations play an important role in change in knowledge and which in turn into the socio-techno-economic changes. It makes people ready for change by changing attitude and traditional habits and providing more skill and knowledge. The information about formal education received by respondents was collected and they were classified into five categories *viz.*, (i) Illiterate (ii) Primary (iii) Secondary (iv) Higher secondary (v) Graduate or above level of education. The data with respect to education are presented in table 1.2 and diagrammatically depicted in figure 1.2.

 Table 1.2

 Distribution of the tribal farmers according to level of education (n=180)

| SN. | Level of education F | | Frequency | Per cent |
|-----|------------------------------------------------------|-------|-----------|----------|
| 1. | Illiterate | | 66 | 36.66 |
| 2. | Primary (Up to 8 th Std.) | | 45 | 25.00 |
| 3. | Secondary (9 th to 10 th Std.) | | 30 | 16.66 |
| 4. | Higher secondary (11th to 12th Std.) | | .) 24 | 13.33 |
| 5. | Graduate or above | | 15 | 08.33 |
| Mea | n: 2.13 & SD: 0.43 | Total | 180 | 100.00 |



Figure 1.2: Distribution of the tribal farmers according to level of education

It is evident from the data in table 1.2 that slightly less than two-fifth (36.66 per cent) farmers were illiterate level of education followed by primary level of education (25.00 per cent) and secondary (16.66 per cent) while 13.33 per cent farmers had higher secondary and very few (08.33 per cent) farmers were graduate or above level of education. From above facts, it can be concluded that more than half (61.66 per cent) tribal farmers were illiterate and primary level of education.

Constraints Faced by Migrated *siddi* tribal Farmers in Adoption of Innovations

Constraints in adoption of new technology never end. However they can be minimized. Presented in table 2.1 and diagrammatically depicted in figure 2.1

| Table 2.1 |
|-------------------------------------------------------|
| Constraints faced by migrated Siddi tribal farmers in |
| adoption of innovations (n=180) |

| SN. | Constraints H | Frequency | Per cent | Rank |
|---------|----------------------------------------------------------------------------|-----------|----------|-------|
| 1. | Lack of information of innovations | 166 | 92.22 | Ι |
| 2. | Information not available in time | 154 | 85.55 | II |
| 3. | Insufficient knowledge about innovations | 148 | 82.22 | III |
| 4. | Lack of technical guidance | 139 | 77.22 | IV |
| 5. | Complicated technology | 124 | 68.88 | V |
| 6. | Less exposure of training | 119 | 66.11 | VI |
| 7. | Agricultural information telecasted through TV is not understandable | 115 | 63.88 | VII |
| 8 | Non-availability of credit in ti | me 103 | 57 22 | VIII |
| 9. 9 | High production cost | 97 | 53.88 | IX |
| 10. | Don't get remunerative price of production | 97 | 53.88 | IX |
| 11. | Lack of local market facility | 91 | 50.55 | Х |
| 12. | Agricultural information is not published regularly in newspaper | 87 | 48.33 | XI |
| 13. | Attack of pest and diseases | 85 | 47.22 | XII |
| 14. | Inadequate finance | 81 | 45.00 | XIII |
| 15. | Unavailability of certified seed | 80 | 44.44 | XIV |
| 16. | High cost of seed | 77 | 42.77 | XV |
| 17. | Shortage and high wages of la | bour 74 | 41.11 | XVI |
| 18. | Lack of irrigation water | 72 | 40.00 | XVII |
| 19. | Irregular rainfall | 65 | 36.11 | XVIII |
| 20. | High rate of electricity | 62 | 34.44 | XIX |

Table reveals that lack of information of innovations rank first (92.22 per cent), information not available in time rank second (85.55 per cent), insufficient knowledge about innovations rank third (82.22 per cent), lack of technical guidance rank fourth (77.22 per cent), complicated technology rank fifth (68.88 per cent), less exposure of training rank sixth (66.11 per cent), agricultural information telecasted through television (TV) is not understandable rank seventh (63.88 per cent), non-availability of credit in time rank eighth (57.22 per cent), high production cost and don't get remunerative price of production ranks ninth (53.88 per cent), lack of local market facility rank tenth (50.55 per cent), agricultural information is not published regularly in newspaper rank eleventh (48.33 per cent), attack of pest and diseases rank twelfth (47.22 per cent), inadequate finance rank thirteenth (45.00 per cent), unavailability of certified



Figure 2.1: Constraints faced by migrated *siddi* tribal farmers in adoption of innovations

seed rank fourteenth (44.44 per cent), high cost of seed fifteenth (42.77 per cent), shortage and high wages of labour rank sixteenth (41.11 per cent), lack of irrigation water seventeenth (40.00 per cent), irregular rainfall eighteenth (36.11 per cent), high rate of electricity rank nineteenth (34.44 per cent).

CONCLUSION

Study indicated that more than half (53.88 per cent) of the respondents belong to middle age group followed by nearly one-third (30.55 per cent) respondents belong to young age group and very less (15.55 per cent) belong to old age group. It can be concluded that majority of the respondents belonged to middle age group and being responsible for maintaining their families as well as farms along with social responsibilities. Investigation is evident that slightly less than two-fifth (36.66 per cent) farmers were illiterate level of education followed by primary level of education (25.00 per cent) and secondary (16.66 per cent) while 13.33 per cent farmers were higher secondary and very few (08.33 per cent) farmers had graduate or above level of education. From above facts, it can be concluded that more than half (61.66 per cent) tribal farmers were illiterate and primary level of education. Research reveals that lack of information of innovations rank first (92.22 per cent), information not available in time rank second (85.55 per cent), insufficient knowledge about innovations rank third (82.22 per cent)

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