

Original Research Article

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## Adoption of Improved Practices Promoted under Vegetable Development Programme among the Tribals

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### ABSTRACT

Vegetables make a major portion of human diet. Though the vegetable requirement is 300g/day/person, we are able to meet about 1/9<sup>th</sup> of the requirement only. A large number of vegetables in India have introduced. However, a planned development in a field of vegetable production will not only improve the nutritional requirement for masses but can also meet the challenge of adequate food supply to the growing population in India. Vegetable has become highly commercialized. And in such competitive market it's very essential to have knowledge and proper adoption of package of practices of vegetables. Vegetable Development Programme under Agriculture services of Tribal Area Development Programme focuses the same. To find out adoption of Tribals in the programme, the study entitled "Adoption of improved practices promoted under Vegetable Development Programme among the tribals" was undertaken. The study was conducted in four villages of lasadiya block of Udaipur district, covering 60 tribal farmers (30 beneficiaries and 30 non-beneficiaries). The data were collected through pre-tested structured interview schedule and appropriate statistical procedures were employed to analyze data. Investigation was made relating to adoption association with the improved agriculture practices of onion, okra, tomato and brinjal.

#### Keywords

Adoption,  
Vegetable  
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### Introduction

From time immemorial, agriculture has been a way of life and it is the principal source of livelihood for more than 55 per cent of the population of this country. Evolved in Africa and then Asia, we ate a huge range of leaves, buds, flower buds, stems, gums, roots, tubers, and even pollens. The number of plant

families we used as food was very much greater than the restricted range we eat today. Wild foods were carefully selected to avoid the plants or parts of plants with bitter and unpleasant taste, which likely contained toxic compounds. Today's plants are more palatable, and yet paradoxically, we eat very few plants as part of our daily diet. The major contribution of plants to human health has always been thought to be the large amounts

of vitamin A, the folic acid vitamin, and the vitamin C they contained; as well as good amount of some minerals. It is becoming more and more obvious that there are many plant chemicals that act together to protect the human body from the onset of cancers and heart diseases, and that vitamin supplements can be helpful, but are not as useful as whole plant.

India, with its wide variability of climate and soil, has good potential for growing a wide range of horticultural crops such as fruits, vegetables, potato, tropical tuber crops and mushrooms, ornamental crops, medicinal and aromatic plants, species and plantation crops like coconut, cashew nut, cocoa, etc. Since the mid-eighties, the government identified horticulture crops as a means of diversification for making agriculture more profitable through efficient land use, optimum utilization of natural resources and creating skilled employment for rural masses and tribals with the past efforts rewarding.

More than 40 kinds of vegetables belonging to different groups, solonaceous, cucurbitaceous, leguminous, cruciferous (cole crops) root crops and leafy vegetables are grown in India in tropical, sub-tropical and temperate regions. Important vegetable crops grown in the country are tomato, onion, brinjal, okra, cabbage etc. India is next only to china in area and production of vegetables. India contributes about 13% to the world vegetable production and occupies first position in the production of cauliflower, second in onion and third in the cabbage in the world.

For the growth of vegetable production, it is quiet essential to involved more farmers with technical knowledge and package of practices. Tribals are doing much well through various government developmental programmes and its adopting the technical knowledge with their agriculture knowledge. The term adoption in

this study implied the acceptance and use of improved practices promoted under agricultural services of TADP by the beneficiaries of the service and non-beneficiaries respondents.

## **Materials and Methods**

The study was conducted in Udaipur district of Rajasthan as for the development of tribals a separate department i.e. Tribal Area Development Department is in function. The department implements various schemes or programmes for tribal development along with agricultural services. Vegetable Development programme was implemented in Lasadiya block of Udaipur district. Two villages were selected randomly for the beneficiaries from programme implementing villages and similarly two villages were selected for non-beneficiaries from non programme villages. Thus there were 2 villages for beneficiaries and 2 villages for non-beneficiaries for the six agricultural services. Thus in total 4 villages were selected for the study purpose.

For selection of sample, thirty beneficiaries were selected randomly, for assessment of adoption a comparable matching sample of 30 non-beneficiary tribals was selected randomly. Thus the total sample for the study comprised of 60 respondents. The scoring of the schedule was finalized in consultation with the researcher's advisory committee members. The scoring in part of the interview schedule was as follows:

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### **Adoption tool**

Assessment was done on three point continuum as always, sometimes and never with scores of 2, 1 and 0 respectively.

## **Measurement of Adoption**

In Agricultural services, adoption of improved practices on various aspects was measured. There was variation in number of aspects, improved practices and scores in each Agriculture service as presented in Table 1.

The respondents were categorized according to MPS in three equal interval categories as high, medium and low adoption, given in Table 2.

## **Statistical analysis of data**

After collecting data it was necessary to analyze with the help of statistics to derive proper and adequate conclusion. Therefore, obtained data were coded, tabulated and analyzed with the help of statistical tools and techniques. Frequency and percentages were used to analyze knowledge and adoption.

## **Results and Discussion**

In adoption of each vegetable practice, the recommended practices adopted by the respondents was studied and presented in Tables 3 to 6. In each service, respondents were categorized in high, medium and low adoption categories along with MPS.

### **Adoption of vegetable development service**

Vegetable Development service is a bunch of four vegetables i.e. onion, okra, tomato and brinjal hence the adoption of improved practice related to these four vegetables by respondents is presented in Table 3 to 6.

### **Adoption of improved onion cultivation practices**

Data presented in Table 3 depicts that in onion cultivation practices, beneficiaries had high extent of adoption in seven components and

medium adoption in three components. In the aspect high yielding varieties of onion, beneficiaries had high MPS (82) also reflected in distribution as 70 per cent of the beneficiaries were in high adoption category. Planting through seeds was adopted by all the beneficiaries (100%) to high extent with MPS 100. Recommended seed rate was adopted to high extent with MPS 67 and 56.66 per cent beneficiaries were in high adoption category and 20 per cent beneficiaries were in medium adoption category. Adoption of plant spacing in the onion was followed by half of the beneficiaries (50%) to high extent followed by one third (33.33 %) to medium extent also revealed in high MPS (67). In following irrigation schedule, the MPS of beneficiaries was 95 indicating high adoption, as majority of the beneficiaries (90%) was in high adoption category. Recommended quantity of FYM in onion was adopted to high extent by 66.66 per cent beneficiaries and medium adoption by 13.33 per cent beneficiaries also revealed in high MPS (73). For crop maturity period MPS was 82 reflecting high adoption and the practice was adopted to high extent by 70 per cent beneficiaries.

In rest of the three components viz doses of fertilizers, Insecticides and pesticides, beneficiaries had medium extent of adoption with MPS 63, 47 and 60 respectively. Distribution of beneficiaries also indicate that in fertilizers doses, 46.66 per cent and 33.33 per cent beneficiaries were in high and medium adoption category respectively while in insecticides 40 per cent and 33.33 per cent beneficiaries were in medium and poor adoption categories respectively. In pesticides, 40 per cent beneficiaries were in high as well as medium adoption category.

Table 3 further reveal that non-beneficiaries also had high extent of adoption in two components i.e. in planting method and crop maturity period as reflected by the MPS 100

and 70 respectively and the distribution of respondents also reveal that 100 per cent and 53.33 per cent non-beneficiaries respectively were in high adoption category. In six components i.e. high yielding varieties, seed rate, plant spacing, irrigation schedule, application of FYM quantity, pesticides non-beneficiaries had medium extent of adoption as the MPS ranging from 37 - 58. Further category wise distribution of non-beneficiaries according to knowledge categories also reveals that 23.33 - 46.66 per cent non-beneficiaries were in medium adoption category in these components of onion cultivation. In rest two components of onion cultivation i.e. fertilizers and insecticides, non-beneficiaries had low extent of adoption with MPS 22 and 30 respectively, also evident from the category wise distribution of non-beneficiaries i.e. 46.66 and 50 per cent non-beneficiary respondents were in low adoption category and 33.33 per cent and 40 per cent non-beneficiaries respectively were in medium adoption category in the components of onion cultivation.

### **Adoption of improved okra cultivation practices**

Perusal of Table 4 reveals that beneficiaries had high extent of adoption in eight components of okra cultivation practices. In the components high yielding varieties of okra, beneficiaries had high MPS (83) and 76.66 per cent of the beneficiaries were in high adoption category. Planting through seeds was adopted completely by all the beneficiaries with MPS 100. High adoption of recommended seed rate by the beneficiaries as reflected with MPS 78, also evident in adoption categories where 63.33 per cent beneficiaries were in high adoption category and 30 per cent beneficiaries were in medium adoption category. Adoption of specific plant spacing in the okra crop was followed to high extent by 60 per cent beneficiaries also

revealed in the high MPS - 72. In following correct irrigation schedule, the beneficiaries had high MPS i.e. 92, and majority of the beneficiaries (83.33%) were in high adoption category. In application of fertilizers, appropriate dose was adopted by 56.66 per cent beneficiaries to high extent and 26.66 per cent beneficiaries to medium extent reflected in high MPS 70. Farm yard manure was highly adopted by 73.33 per cent beneficiaries also depicted in MPS 82. High MPS (80) for crop maturity period among the beneficiaries also reflected in distribution, as by 66.66 per cent beneficiaries were in the high adoption category and 26.66 per cent beneficiaries were in medium adoption category in the components of okra cultivation.

In rest two components viz use of insecticides (52 MPS) and pesticides (58 MPS) in okra cultivation medium extent of adoption was observed among the beneficiaries of okra cultivation also reflected in distribution of beneficiaries, as in insecticides 33.33, 36.66 and 30 per cent beneficiaries respectively were in high, medium, and low adoption categories. While in case of pesticides 33.33, 50 and 16.66 per cent beneficiaries respectively were in high, medium and low adoption category.

With regard to non-beneficiaries (Table 4), it is important to note that high extent of adoption was found in two components of okra cultivation i.e. in planting method and irrigation schedule as revealed by MPS 100 and 70, respectively and all the non-beneficiaries (100%) were in high adoption category in planting method while in irrigation schedule, 56.66 per cent non-beneficiaries were in high and 23.33 per cent non-beneficiaries were in medium adoption category. In rest eight components of okra cultivation i.e. variety grown, seed rate, spacing kept, doses of fertilizers, application of FYM quantity, insecticides and pesticides, diseases and control measures and crop

maturity period, non-beneficiaries had medium extent of adoption as the MPS ranges or from 35 - 60. Further category wise distribution of the non-beneficiaries in these components (Table 4), further reveal that 30 - 60 per cent non-beneficiaries were in medium adoption category of okra cultivation however, 13.33 - 43.33 per cent non-beneficiaries were in high adoption category and 16.66 - 46.66 per cent non-beneficiaries in poor adoption category.

The findings of the present study are in line with Singh *et al.*, (2005) who found that recommended sowing rate was used by 94 per cent of the respondents. More than 25 per cent of the respondents had given first irrigation as recommended; some supplied less or more irrigation. The recommended plant-to-plant spacing was adopted by 20 per cent of the respondents; the others reduced or increased the plant spacing. Approximately 40 per cent maintained the row spacing at 45 cm; the others reduced or increased the row spacing. FYM [farmyard manure] was applied at the recommended rate by 34.67 per cent of the respondents. Some increased or reduced the FYM rate, whereas others did not use FYM.

More than 60 per cent of the farmers conducted hoeing as recommended. Only 10.67 per cent had sprayed pesticides at recommended rates; the rest had applied pesticides at rates higher by 300-600 per cent. Only 17.33 per cent had applied urea during sowing and at 40-45 days after sowing (DAS); some had applied urea at 4-5 and 30-45 DAS, and at 8-10 and 30-45 DAS. Scarcity of labour was identified by 83.33 per cent of the respondents as the main constraint in okra production.

**Adoption of improved tomato cultivation practices**

Data in Table 5 regarding over all adoption of tomato cultivation practices high adoption (67.27 MPS) also depicts from distribution of beneficiaries that 53.33 per cent and 46.66 per cent of the beneficiaries were in high and medium adoption categories respectively. Non-beneficiaries were found in medium adoption category with MPS 55 and distribution of beneficiaries reveals that 53.33 per cent and 46.66 per cent of the beneficiaries were in medium and low adoption categories respectively.

**Table.1** Service wise details of adoption scale

S. No	Agricultural Services	Number of Aspects	Number of practices	Maximum Score
1	Vegetable Development	10	10	20

**Table.2** Adoption categories of respondents

Categories	Score Range
High	66.67 - 100
Medium	33.34 - 66.66
Low	0 – 33.33

**Table.3** Distribution of the respondents by the adoption of improved onion cultivation practices  
n=60

S. No	Components	Extent of adoption							
		Beneficiaries n <sub>1</sub> =30 f(%)				Non – Beneficiaries n <sub>2</sub> =30 f(%)			
		High	Medium	Low	MPS	High	Medium	Low	MPS
1	High yielding varieties	21 (70)	7 (23.33)	2 (6.66)	<b>82</b>	12 (40)	11 (36.66)	7 (23.33)	<b>58</b>
2	Planting methods	30 (100)	0	0	<b>100</b>	30 (100)	0	0	<b>100</b>
3	Seed Rate	17 (56.66)	6 (20)	7 (23.33)	<b>67</b>	8 (26.66)	11 (36.66)	11 (36.66)	<b>45</b>
4	Spacing	15 (50)	10 (33.33)	5 (16.66)	<b>67</b>	8 (26.66)	14 (46.66)	8 (26.66)	<b>50</b>
5	Irrigation Schedule	27 (90)	3 (10)	0	<b>95</b>	18 (60)	7 (23.33)	5 (16.66)	<b>43</b>
6	Fertilizers	14 (46.66)	10 (33.33)	6 (20)	<b>63</b>	6 (20)	10 (33.33)	14 (46.66)	<b>22</b>
7	FYM	20 (66.66)	4 (13.33)	6 (20)	<b>73</b>	13 (43.33)	11 (36.66)	6 (20)	<b>37</b>
8	Insecticides	8 (26.66)	12 (40)	10 (33.33)	<b>47</b>	3 (10)	12 (40)	15 (50)	<b>30</b>
9	Pesticides	12 (40)	12 (40)	6 (20)	<b>60</b>	7 (23.33)	13 (43.33)	10 (33.33)	<b>45</b>
10	Maturity Period	21 (70)	7 (23.33)	2 (6.66)	<b>82</b>	16 (53.33)	10 (33.33)	4 (13.33)	<b>70</b>
<b>Over all</b>		<b>15 (50)</b>	<b>15 (50)</b>	<b>0</b>	<b>72.88</b>	<b>0</b>	<b>19 (63.33)</b>	<b>11 (36.66)</b>	<b>37.88</b>

**Table.4** Distribution of the respondents by the adoption of improved okra cultivation practices  
n=60

S. No	Components	Extent of adoption							
		Beneficiaries n <sub>1</sub> =30 f(%)				Non – Beneficiaries n <sub>2</sub> =30 f(%)			
		High	Medium	Low	MPS	High	Medium	Low	MPS
1	High yielding varieties	23 (76.66)	4 (13.33)	3 (10)	<b>83</b>	12 (40)	9 (30)	9 (30)	<b>55</b>
2	Planting methods	30 (100)	0	0	<b>100</b>	30 (100)	0	0	<b>100</b>
3	Seed Rate	19 (63.33)	9 (30)	2 (6.66)	<b>78</b>	11 (36.66)	9 (30)	10 (33.33)	<b>52</b>
4	Spacing	18 (60)	7 (23.33)	5 (16.66)	<b>72</b>	9 (30)	10 (33.33)	11 (36.66)	<b>47</b>
5	Irrigation Schedule	25 (83.33)	5 (16.66)	0	<b>92</b>	17 (56.66)	7 (23.33)	6 (20)	<b>70</b>
6	Fertilizers	17 (56.66)	8 (26.66)	5 (16.66)	<b>70</b>	5 (16.66)	11 (36.66)	14 (46.66)	<b>35</b>
7	FYM	22 (73.33)	5 (16.66)	3 (10)	<b>82</b>	13 (43.33)	10 (33.33)	7 (23.33)	<b>60</b>
8	Insecticides	10 (33.33)	11 (36.66)	9 (30)	<b>52</b>	7 (23.33)	15 (50)	8 (26.66)	<b>48</b>
9	Pesticides	10 (33.33)	15 (50)	5 (16.66)	<b>58</b>	5 (16.66)	18 (60)	7 (23.33)	<b>47</b>
10	Maturity Period	20 (66.66)	8 (26.66)	2 (6.66)	<b>80</b>	12 (40)	13 (43.33)	5 (16.66)	<b>62</b>
<b>Over all</b>		<b>17 (56.66)</b>	<b>11 (36.66)</b>	<b>2 (6.66)</b>	<b>77.27</b>	<b>3 (10)</b>	<b>24 (80)</b>	<b>3 (10)</b>	<b>52.12</b>

**Table.5** Distribution of the respondents by the adoption of improved tomato cultivation Practices  
n=60

S. No	Components	Extent of adoption							
		Beneficiaries n <sub>1</sub> =30 f(%)				Non – Beneficiaries n <sub>2</sub> =30 f(%)			
		High	Medium	Low	MPS	High	Medium	Low	MPS
1	High yielding varieties	21 (70)	5 (16.66)	4 (13.33)	<b>78</b>	12 (40)	13 (43.33)	5 (16.66)	<b>62</b>
2	Planting methods	30 (100)	0	0	<b>100</b>	30 (100)	0	0	<b>100</b>
3	Seed Rate	16 (53.33)	5 (16.66)	9 (30)	<b>62</b>	11 (36.66)	10 (33.33)	9 (30)	<b>55</b>
4	Plant Spacing	12 (40)	14 (46.66)	4 (13.33)	<b>63</b>	6 (20)	16 (53.33)	8 (26.66)	<b>47</b>
5	Irrigation Schedule	22 (76.66)	8 (26.66)	0	<b>87</b>	13 (43.33)	11 (36.66)	6 (20)	<b>62</b>
6	Fertilizers	19 (63.33)	9 (30)	2 (6.66)	<b>78</b>	11 (33.33)	15 (50)	4 (13.33)	<b>62</b>
7	FYM	18 (60)	12 (40)	0	<b>80</b>	14 (46.66)	15 (50)	1 (3.33)	<b>71.7</b>
8	Insecticides	12 (40)	9 (30)	9 (30)	<b>55</b>	5 (16.66)	15 (50)	10 (33.33)	<b>58</b>
9	Pesticides	9 (30)	16 (53.33)	5 (16.66)	<b>57</b>	4 (13.33)	17 (56.66)	9 (30)	<b>42</b>
10	Maturity Period	19 (63.33)	10 (33.33)	1 (3.33)	<b>80</b>	12 (40)	12 (40)	6 (20)	<b>60</b>
<b>Over all</b>		<b>16 (53.33)</b>	<b>14 (46.66)</b>	<b>0</b>	<b>67.27</b>	<b>0</b>	<b>16 (53.33)</b>	<b>14 (46.66)</b>	<b>55</b>

**Table.6** Distribution of the respondents by the adoption of improved brinjal cultivation practices  
n=60

S. No	Components	Extent of Adoption							
		Beneficiaries n <sub>1</sub> =30 f(%)				Non – Beneficiaries n <sub>2</sub> =30 f(%)			
		High	Medium	Low	MPS	High	Medium	Low	MPS
1	High yielding varieties	19 (63.33)	9 (30)	2 (6.66)	<b>78.33</b>	11 (36.66)	13 (43.33)	6 (20)	<b>58.3</b>
2	Planting methods	30 (100)	0	0	<b>100</b>	30 (100)	0	0	<b>100</b>
3	Seed Rate	21 (70)	7 (23.33)	2 (6.66)	<b>81.67</b>	13 (43.33)	13 (43.33)	4 (13.33)	<b>65</b>
4	Plant Spacing	17 (56.66)	11 (36.66)	2 (6.66)	<b>75</b>	9 (30)	16 (53.33)	5 (16.66)	<b>56.7</b>
5	Irrigation Schedule	16 (53.33)	5 (16.66)	9 (30)	<b>62</b>	12 (40)	10 (33.33)	8 (26.66)	<b>57</b>
6	Fertilizers	16 (53.33)	5 (16.66)	9 (30)	<b>62</b>	7 (23.33)	10 (33.33)	13 (43.33)	<b>40</b>
7	FYM	22 (73.33)	8 (26.66)	0	<b>87</b>	16 (53.33)	11 (36.66)	3 (10)	<b>72</b>
8	Insecticides	14 (46.66)	10 (33.33)	6 (20)	<b>63</b>	8 (26.66)	14 (46.66)	8 (26.66)	<b>50</b>
9	Pesticides	13 (43.33)	9 (30)	8 (26.66)	<b>58</b>	6 (20)	15 (50)	9 (30)	<b>45</b>
10	Maturity Period	20 (66.66)	7 (23.33)	3 (10)	<b>78</b>	13 (43.33)	12 (40)	5 (16.66)	<b>63</b>
<b>Over all</b>		<b>16 (53.33)</b>	<b>14 (46.66)</b>	<b>0</b>	<b>67.72</b>	<b>3 (10)</b>	<b>15 (50)</b>	<b>12 (40)</b>	<b>55.30</b>

A glance over the table depict that beneficiaries had high extent of adoption in seven components as compared to non-beneficiaries who had high extent of adoption in two components only.

Regarding beneficiaries adoption of tomato cultivation practices, it can be seen that high MPS i.e. 78 in recommended tomato varieties also revealed by 70 per cent beneficiaries falling in high adoption category. Further planting through seeds was adopted by all the beneficiaries to high extent also reflected by MPS 100. Recommended irrigation schedule was adopted in tomato cultivation by 73.33 per cent beneficiaries to high extent also depicted in high MPS (87). Advised doses of fertilizers in tomato cultivation were adopted by 63.33 per cent beneficiaries to high extent and medium extent by 30 per cent beneficiaries, also revealed by high MPS (78). MPS (80) was calculated for FYM also revealed by the adoption categories as 60 per cent beneficiaries were in high extent and 40 per cent beneficiaries in medium extent categories. Maturity period of tomato crop was highly adopted by 63.33 per cent beneficiaries and 33.33 per cent beneficiaries were in medium adoption category and the MPS 80 for the practice also indicates high extent of adoption. In rest four practices, medium extent of adoption was found i.e. recommended seed rate was adopted by 53.33 per cent to high extent and 16.66 per cent beneficiaries to medium extent with medium MPS 62. The practices related to plant spacing were adopted by 40 per cent and 46.66 per cent beneficiaries to high and medium extent respectively as also evident by medium MPS - 63. Insecticides were adopted by 40 per cent and 30 per cent beneficiaries to high and medium extent according to adoption categories respectively and also 30 per cent beneficiaries in low adoption categories leading to medium extent of adoption also evident in MPS (55). Pesticides were adopted by 53.33 per cent beneficiaries to medium extent and 30 per cent beneficiaries to high extent and 16.66 per cent beneficiaries also in low adoption category leading to medium

extent of adoption with MPS – 57. In case of non-beneficiaries, Table 5 further reveals that high extent of adoption was found in two components i.e., planting method and quantity of FYM application with MPS 100 and 71.7 respectively and were falling in high (100 and 46.66) and medium (50) adoption categories respectively. In rest nine components non-beneficiaries had medium adoption viz high yielding varieties (62 MPS), seed rate (55 MPS), plant spacing (47 MPS), irrigation schedule (62 MPS), fertilizers (62 MPS), insecticides (58 MPS), pesticides (42 MPS) and crop maturity period (60 MPS) as indicated by MPS which is also revealed in category wise distribution as 33.33 - 56.66 per cent non-beneficiaries were in medium adoption category and 13.33 – 43.33 per cent non-beneficiaries were in low adoption category of the tomato cultivation practices.

The findings are in conformity with Kumar *et al.*, (2004) that high majority of the farmers cultivated tomato hybrids, planted during June-July, followed 75-100 g per ha seed rate, adopted 60 x 40 cm spacing and applied only 5-10 tones of FYM per ha.

#### **Adoption of improved brinjal cultivation practices**

In Vegetable Development service, data related to Brinjal cultivation practices is presented in Table 6. The overall adoption of beneficiaries in brinjal cultivation was high as depicted by MPS 67.72 and 53.33 percent beneficiaries were falling in high adoption category and 46.66 percent beneficiaries were falling in medium adoption category. In case of non-beneficiaries, MPS 55.30 indicates medium adoption and 50 percent and 40 per cent of the non-beneficiaries were falling in medium and low adoption categories of Brinjal cultivation respectively.

Further the table depicts that in brinjal cultivation, beneficiaries had high extent of adoption in six practices. In these components, high yielding varieties of brinjal, beneficiaries had high MPS 78.33 also reflected in distribution as 63.33 per cent of the

beneficiaries were in high adoption category. Planting through seeds was adapted to high extent as all the beneficiaries were in high adoption category and MPS was also 100. Recommended seed rate was adapted to high extent by 70 per cent beneficiaries and medium extent by 23.33 per cent beneficiaries also evident by high MPS (81.67). Adoption of plant spacing in the brinjal crop was followed by 56.66 per cent beneficiaries to high extent also revealed by high MPS (75). Recommended quantity of FYM in brinjal was highly adopted by 76.66 per cent beneficiaries and 26.66 per cent beneficiaries were in medium adoption category also revealed in MPS - 87. MPS for crop maturity period was found to be high as 78 and the practice was also adopted to high extent by 66.66 per cent beneficiaries.

In rest four components viz., irrigation schedule, doses of fertilizers, Insecticides and pesticides beneficiaries had medium extent of adoption with MPS 62, 62, 63 and 58 respectively and 16.66 - 33.33 per cent of the beneficiaries were falling in medium and 20 - 30 per cent of the beneficiaries were in low adoption category.

Table 6 further reveals that non-beneficiaries also had high extent of adoption in two components i.e. in planting method and FYM with MPS 100 and 72 respectively. In rest of the eight components i.e. improved varieties, seed rate, plant spacing, irrigation schedule, application of FYM quantity and diseases and control measures, non-beneficiaries had medium extent of adoption as the MPS ranging between 40 - 65. Further category wise distribution also reveals that 33.33 - 53.33 per cent non-beneficiaries were in medium adoption

category in these practices of brinjal cultivation. In adoption of the programme, majority of the beneficiaries were in high and medium adoption categories in various components of all the programme and few of the beneficiaries were in low adoption category while in case of non-beneficiaries all were in medium or low adoption categories in the vegetable development programme.

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