

## CHAPTER 4

### FINDINGS AND DISCUSSION

The major objective of this investigation is to identify the levels of knowledge and the degree of favorable attitudes towards population education as a determinant for training in population education for extension functionaries of both the countries. The present chapter consists of the findings and their interpretations in accordance with the objectives and the hypotheses of the study. The findings are presented in the following five major sections:

- 4.1 Description of the general characteristics of the extension functionaries from the four Eastern states of India and the country of Bangladesh.
- 4.2 Knowledge possessed by various levels of extension functionaries, from the four Eastern states of India and the country of Bangladesh on certain selected aspects of population education.
  - 4.2.1 Distribution of extension functionaries from the four Eastern states of India and the country of Bangladesh according to their levels of knowledge regarding the selected aspects of population education.
  - 4.2.2 Relationship between the levels of knowledge of extension functionaries from the four Eastern states

- 4.3.3 Differences between the attitudes of extension functionaries at all levels among the four Eastern states of India and the country of Bangladesh regarding selected aspects of population education.
- 4.4 Relationship between knowledge and attitude of extension functionaries of the four Eastern states of India and the country of Bangladesh.
- 4.5 Draft curricula for the purpose of training of the extension functionaries of both the countries based on the findings of the study.
- 4.1 Description of the General Characteristics of Extension Functionaries from the Four Eastern States of India and the Country of Bangladesh.

This section describes the personal and professional characteristics of extension functionaries statewise in India and the country of Bangladesh.

Age, religion, size of the family and type of the family were selected as personal variables. The assumption with which age was studied was that extension functionaries who are younger in age may be more open and receptive to new ideas and thus may be ready to change, whereas this assumption may not be true for the older people.

The size of the family and type of the family gives real life experience, and thus might influence one's desire to learn more and the change in attitude, and also willingness to impart knowledge to others.

India being a secular state, people belonging to various faiths get equal opportunity of education as well as employment. The extension personnel may belong to different religions. The same could be true for Bangladesh also, although it is theocratic state. Each religion is based on certain underlying philosophies. These philosophies very often guide the life of individuals and their family. Thus it may condition individual's attitude towards a new phenomenon in this study - Population education. These religious groups can interact with and within their own religious group on a large social platform. This may promote favorable attitudes resulting into desirable changes. Thus religion was considered as an important variable for the study.

Under professional characteristics education, professional training and income were selected as variables to be studied in relation to knowledge and attitude. Education itself gives opportunities to increase knowledge about various aspects of life, which affects day to day living. It was therefore felt that a better educated person with better training will be well informed about the importance of

population education in life, and thus will have a greater degree of favourable attitude towards population education. This will increase the receptibility of an individual making him more inclined towards training in such aspects and also to promote it amongst those who need to be educated the most. Income is indirectly related to knowledge yet it is important to study, as in this materialistic world everything is affected by money.

#### 4.1.1 Personal Characteristics of Extension Functionaries from the State of Bihar.

Three hundred and thirty two extension functionaries from the state of Bihar were selected for the study. Out of which 241 were village extension agents, 60 block development officers, 14 instructional staff, 16 district extension officers and one was the director of agriculture.

Out of the total 241 village extension agents, majority (75%) belonged to a younger age group of 20 to 25 which meant that they were almost fresh and had very little working experience. For the level of block development officers also majority (70%) were not beyond 35 years of age. There were (roughly) only 6% VEA who were above 30 years and about 22% of BDOs who were between the age of 35 to 45 years. On the other hand a good majority (71%) of instructional staff and district extension officers (81%) were from the age group of 35 to 45

years of age, but none of these extension functionaries were above 50 years of age. It was only the director of agriculture who was above fifty, which was quite natural as this post is attained only after several years' of service and experience. In general, the entire team in Bihar state was found to be relatively younger.

As for religion, majority of the sample was found to be followers of Hindu religion, nevertheless, there were a small percentage of respondents who were Muslim and Christian by religion.

In the cadre of VEA, nearly 76% were Hindus and the rest were Muslims, whereas in the case of BDO there were about 28% Muslims, 17% of Christians and the rest were Hindus. All the 100% of instructional staff and the director of agricultural were found to be Hindu. District extension officers following Muslim and Christians religion were found in equal percentage (18.75%) and the rest Hindus.

The size of the family and type of family varied to a great extent for each level of extension functionaries. In the case of village extension agents the entire sample was spread over from less than 3 to more than 10 members. However, maximum percentage of VEA's had 6 to 8 members. There were a few respondents (4.98%) who belonged to the small family size of less than 3 members. About 73% of

BDO had a family size of 6 to 8 members, but none had a family size of less than 3. In the case of instructional staff and district extension officers all 100% sample had relatively small family consisting of 3 to 5 members. The director of agriculture had a small family of less than 3 members.

As for the type of family, majority of the higher level extension functionaries had nuclear families. It was only 21% of instructional staff who had their parents living with them. The same could be said for the BDO's too, as only about 28% were found to be having a joint family where their other married brothers with their respective families shared the household, but the rest either had nuclear families or at the most their parents were living with them. It was only in the case of VEA's that a good majority of about 61% had a joint family where their brothers with their families lived with them.

Thus it could be said that except for the category of VEA all the rest, in a good majority, had a nuclear family yet had a family size of 3 to 5 or 6 members. It was only the director of agriculture who had a family of less than 3 members.

#### Professional Characteristics of Extension Functionaries from the State of Bihar

Under professional characteristics, education,

professional training, and income were the three parameters which were studied in the present investigation.

As was expected, the level of education increased with professional status, barring a few exceptions. In the case of VEA's, only 9% had graduate degree and 4% post-graduate degrees, all the rest possessed high school certificate, the minimum requirement for the post. As it should be, all the Block Development officers were graduates, majority (68.33%) with agriculture degree and the rest were bachelors of art. All the rest at higher level in the hierarchy were post-graduates and the director of agriculture had a Ph.D. degree. All the extension functionaries except the parapatitic team or field staff, that is, the village extension agents, had in-service training. In the case of VEA's a good majority (88%) had pre-service training. There were a negligible percentage (.04%) who did not have any training at all.

As for income though a vast majority (81%) of VEA's had an income of less than Rs.500 p.m. the rest were equally distributed between the income group of Rs.501 to Rs.700 and Rs.701 and above, 9.54% of respondents of VEA level belonged to either of the two groups.

All the block development officers received between Rs.601 to Rs.800 p.m. out of which nearly 67% got only Rs.601 to Rs.700 per month. The income of instructional

staff was slightly higher than some of the BDO's. Majority of the instructional staff (71.42%) had an income of between Rs.701 to Rs.800 per month and the rest between Rs.801 to Rs.900 per month. The income of majority (94%) of the district extension officers was Rs.901 to Rs.1000 per month but still there were nearly 6% who earned only Rs.801 to Rs.900 per month. The director of agriculture, the senior most officer earned above Rs.1000 per month.

#### 4.1.2 Personal Characteristics of Extension Functionaries from the State of Meghalaya

Meghalaya is a comparatively small state, thus only 133 extension functionaries were selected for the study (out of which 99 were village extension agents), 24 block development officers, 4 instructional staff, 5 district extension officers and one director of agriculture.

Village extension agents and block development officers belonged to a very young age, about 61% of VEA's were not above 25 years of age and the rest between 31 to 35 years, whereas nearly 46% BDO also belonged to this group. About 54% BDO were between 36 to 45 years. Whereas the instructional staff were little mature, as nearly 75% were between 46 to 50 years of age the director of agriculture also belonged to this group, on the contrary 60% district extension officers were not above 35 years and the rest also were not above 40 years.

In the case of religion, Meghalaya was the state amongst all the four that had a good number of respondents who were Christian by religion. Nearly 66% VEA, 45% BDO and 40% DEO



were Christians; it was only in the case of IS and DA that all 100% were found to be Hindus. Very few respondents were found to be from Muslim religion (16% of BDO and 1% VEA).

Though for the size of the family variable, respondents of VEA and BDO level were distributed to families having less than 3 members to more than 10 members. Nearly 50 to 55% of both the categories did not have more than 5 members in the family. The fact remained that the rest of the respondents had large families.

It was nearly 42% of the block development officers and 25% of VEAs who had a joint family where other married brothers lived together. About 70% of VEAs had nuclear families, whereas all the other extension functionaries at higher level had nuclear families.

#### Professional Characteristics of Extension Functionaries from the State of Meghalaya

Though a good majority of the VEA who had passed only high school certificate examination, nearly 34% had graduate degree in agriculture, whereas all 100% BDOs were graduates only. All the other higher levels, that is instructional staff, DEOs and DAs were post-graduates. Majority of the extension functionaries at all levels had in-service training.

As for income, it varied largely according to the professional status. All VEAs earned upto Rs.600 per month

but majority (71%) were earning below Rs.500 per month. There were nearly 67% of BDO's who earned Rs.701 to Rs.800 per month, whereas all 100% IS's were earning between Rs.901 to Rs.1000 per month. Also about 94% of DEO's who were earning the same amount (Rs.901 to Rs.1000) though 6% of DEO's earned little less. The director of agriculture was obviously earning more than Rs.1000 per month.

#### 4.1.3 Personal Characteristics of Extension Functionaries from the State of Tripura

Tripura, a still smaller state than Meghalaya, had a still smaller number of extension functionaries. Apart from being a small group accessibility to these respondents was extremely difficult. In all only 65 extension functionaries could be contacted, out of which 40 were VEAs, 17 BDOs, 4 ISs, 3 DEOs and 1 Director of Agriculture. When the variable of age was considered, it was found that though none of the VEA was above 30 years of age, only 35% were younger and belonged to 20-25 age group. About 65% of BDOs were between 31 to 40 years of age. On the contrary a good majority (75%) of ISs were between 46 to 50 years of age. All the 100% of DEOs were quite young as compared to IS. They all were between 41 to 45 years of age. The director of agriculture was above 50 years.

For religion only two groups were indicated with majority of all level of extension functionaries belonging to Hindu religion. There were only 12.5% of VEA's and 25% of ISs who were Muslims by religion, all the rest were Hindus.

As for the size of the family, the respondent of first two categories were spread over, ranging from having less than 3 members to more than 10 members, VEA's (66%) and BDO (6%) who had large families. All the rest had families of 3 to 5 members. A good percentage of about 45% of BDOs had a small family of less than 3 members in their family.

Nearly 33% of VEA's had a joint family where their married brothers shared the household. All the rest either had nuclear families or at the most their parents lived with them, the former was found to be more true in the case of VEA's and BDO's, DEO's and DA. Whereas the IS were equally distributed in both the categories.

#### Professional Characteristics of Extension Functionaries from the State of Tripura

All the higher level of hierarchy from IS to DA as expected were having post-graduate degrees in agriculture, about 42% of VEA's were graduates and post-graduates, out of which 2.5% were post-graduates with agriculture degree. There were only 58% of VEA who were found to have been educated upto high school level.

Majority of the extension functionaries had undergone in-service training and there was none who was without any training. All higher level of extension functionaries, inclusive of IS, DEO and DA had undergone training after they had joined their respective services.

It was only this State which showed the clear demarkation of income according to the professional status proving that the better the professional status, the higher was the income.

The income of VEA ranged from less than Rs.500 to Rs.600 per month, 55% of VEA's earned between Rs.501 to Rs.600 per month, the rest below Rs.500 whereas 80 of the BDO earned between Rs.601 to Rs.700 and only about 12% earned above Rs.700 but less than Rs.801 per month. Instructional staff (100%) had an income of Rs.801 to Rs.900 and DEO between Rs.901 to Rs.1000 per month. The director of agriculture earned above Rs.1000 per month.

#### 4.1.4 Personal Characteristics of Extension Functionaries of West Bengal.

Two hundred and seventeen extension functionaries were selected from the state of West Bengal, consisting of 142 VEA, 30 BDO, 31 IS, 13 DEO and one DA. West Bengal is the state where there were maximum number of training centers. The VEA ranged between 20 to 40 years of age but nearly 96% were not above 30 years. Whereas 60% of the BDO were between 31 to 40

years, but the rest (23.33%) were above 43. There were only nearly 17% who were less than 30 years. All the IS were above 35 but below 50 years with majority between 41 to 45 years of age. About 62% of the district extension officers were between 46 to 50 years. There were nearly 8% of DEO who were above 50 years of age. The DA was also of the same age. These were nearly 32% of DEO who were more than 35 but not above 45 years of age.

Amongst VEA's, IS and DEO's all the three religious groups were indicated to be followed, yet a high majority were of Hindus followed by Muslims. In the case of VEA's Hinduism was followed by Muslim religion. In the case of IS and DEO's Hindu religion was reported in higher majority followed by Christian religion whereas all 100% BDO's and DA were found to be Hindus.

Majority of BDO's, IS, DEO's and DA had a family size of not more than 5 members whereas the reverse was the case with VEA, there were only about 34% VEA who had the family of less than 6 members but 66% of VEA's had large size families. There were 20% of BDO and about 13% IS who had 6 to 8 members in their families. About 35% of VEA's who had a joint family where other brothers with their families also shared the household, but all the rest of the VEA's and other categories

of extension functionaries who either had a nuclear family, or a joint family in which their parents were living with them, where the former was found to be more true, that is they had nuclear families.

Professional Characteristics of Extension  
Functionaries from the State of West Bengal

As far as the educational level of the extension functionaries was considered it could be safely said that this state ranked higher in education. About 46% of the VEA's had higher education out of which 44.60% had graduate degree and 1.40% had post-graduate degree, though all 100% BDO's and IS's were graduates and post-graduates, there were little over 38% of DEO's who had Ph.D. degrees and the director of agriculture also had a Ph.D. degree. All had either pre-service or in-service training with majority of these functionaries having in-service training but it was not true in the case of VEA's where about 57% had undergone the training before they joined their job.

Slightly above 94% VEA had an income upto Rs.600 but were found heavily clustered on the lower side of the scale i.e. 66% having less than Rs.500 per month. Still there were about 6% who earned between Rs.601 to Rs.700 per month, there were nearly 32% of BDO who earned the same amount but majority (46.66%) earned between Rs.701 to Rs.800 per month. All 100% IS's earned between Rs.801 to Rs.900 per month

[illegible]

Table 9. Description of Professional Characteristics of Extension Functionaries from the four selected Eastern States of India in Number and Percentage.

Characteristics	VEA				BDO				IS				DEO				DA			
	B	M	T	WB	B	M	T	WB	B	M	T	WB	B	M	T	WB	B	M	T	WB
N =	241	99	40	142	60	24	17	30	14	4	4	31	16	5	3	13	1	1	1	1
<b>Education</b>																				
High School	214	64	23	76	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	88.79	64.64	57.50	53.52	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
B.A.	5	-	14	45	19	-	6	-	-	-	-	-	-	-	-	-	-	-	-	-
	2.07	-	3.0	31.69	31.66	-	35.23	-	-	-	-	-	-	-	-	-	-	-	-	-
B.Sc.	16	34	2	19	41	24	11	30	-	-	-	-	-	-	-	-	-	-	-	-
	6.63	34.34	5.0	13.38	68.33	100	64.70	100	-	-	-	-	-	-	-	-	-	-	-	-
M.A.	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	1.40	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
M.Sc.	9	-	1	-	-	-	-	-	14	4	4	31	16	5	3	6	-	1	1	-
	3.73	-	2.50	-	-	-	-	-	100	100	100	100	100	100	100	61.53	-	-	-	-
Ph.D.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Training</b>																				
Pre-service	212	36	17	81	19	10	6	-	-	-	-	-	-	-	-	-	-	-	-	-
	87.96	36.36	42.0	57.04	31.66	41.66	35.23	-	-	-	-	-	-	-	-	-	-	-	-	-
In-service	28	63	23	61	41	14	11	30	14	4	4	31	16	5	3	13	1	1	1	1
	11.61	66.66	57.5	42.96	68.33	58.33	64.7	100	100	100	100	100	100	100	100	100	-	-	-	-
No training	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	0.04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Income</b>																				
Below Rs.500	195	71	18	94	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	80.91	71.71	45.0	66.19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rs.501 to 600	14	28	22	40	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	5.80	28.28	55.0	28.16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rs.601 to 700	9	-	-	8	40	8	15	10	-	-	-	-	-	-	-	-	-	-	-	-
	3.73	-	-	5.63	66.66	33.35	88.23	33.31	-	-	-	-	-	-	-	-	-	-	-	-
Rs.701 to 800	-	-	-	-	20	16	2	14	10	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	33.33	66.66	11.76	46.66	71.42	-	-	-	-	-	-	-	-	-	-	-
Rs.801 to 900	1	-	-	-	-	-	-	6	4	-	4	31	1	-	-	-	-	-	-	-
	0.04	-	-	-	-	-	-	20.0	28.57	-	100	100	6.25	-	-	-	-	-	-	-
Rs.901 to 1000	3	-	-	-	-	-	-	-	-	4	-	-	15	5	3	12	-	-	-	-
	1.24	-	-	-	-	-	-	-	-	100	-	-	93.75	100	100	92.31	-	-	-	-
Above Rs.1000	19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	1	1	1
	7.88	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.69	-	-	-	-



whereas 92% DEO's earned little more, that is, between Rs.901 to Rs.1000. There were nearly 8% who earned equal to the director of agriculture, that is, above Rs.1000 per month.

#### 4.1.5 Description of Characteristics of Extension Functionaries from the Country of Bangladesh

Bangladesh is a very small country with no division like states. There are 20 districts in all. Thus sample from the entire country were taken. In all, 671 extension functionaries constituted the sample of the study. Out of these 671 extension functionaries, 389 were VEA's, 198 BDO's, 63 IS's, 18 DEO's and 3 directors of agriculture.

#### Personal Characteristics of Extension Functionaries from the Country of Bangladesh

The village extension agents were found to be more mature in age as compared to the BDO's and IS's (Table 10) as nearly 73% of BDO's and 70% of the instructional staff were not above 30 years as compared to the 43% of VEA's who were found to be spread over above 30 years of age, so was the case of BDO's and the instructional staff, but their percentages were relatively less. The same was found to be true for DEO's. As nearly 80% of DEO's had not crossed 35 years, and there were only 11% who were between 36 to 40 years of age. On the contrary all directors of agriculture were above 45 years of age. Over all out of the total of 671 extension functionaries there were only 23.85% who were

above the age of 40 years. Thus it could be concluded that the entire team was relatively younger.

As for religion, majority (95%) of respondents from VEA level were Muslims and only about 5% were Hindus but for the rest of the categories all the 100% were Muslims.

A good majority of the VEA's (73%), DEO's (67%) had large families. In the case of BDO's nearly 46% had large families so was somewhat true in the case of IS's in that nearly 37% of IS had large families. It was only in the category of DA that majority (66.67%) had small families of less than 3 members. Nearly 37 to 43% of the respondents had joint families where the married brothers, with their families, shared the household; the rest of them either had nuclear families or at the most their parents lived with them.

#### Professional Characteristics of Extension Functionaries from the Country of Bangladesh

An overall view of educational qualification of these extension functionaries indicates that the level of education was relatively low. There were only 12 respondents out of 671 who had acquired masters' degree. Out of the total of 389 VEA nearly 96% had passed high school examination but amongst these, 389-nearly 40% had a one year diploma in agriculture added to their qualification. Only about 4% of VEA's had graduated mainly in agriculture. Whereas majority of BDO (74%), IS (82.06%), and DEO (94.44%) had graduate degree in

agriculture, to the extent that 66.67% of directors of agriculture also had graduate degrees only. At VEA level about 68% had undergone pre-service training but at all, the other levels the majority had their training after joining their respective jobs. There were about 6% of VEA only and 5% of instructional staff who did not have any kind of training at all.

As for the variable of income, it was found to be quite low if we compare it with Indian standard. Nearly 37% of BDO, 30% of IS, 78% of DEO and 100% of DA indicated their income to be above 1000 Takka, but in terms of Indian currency this was equal to above Rs.625 only. Income-wise the VEA's, BDO's and IS's were spread over from less than Takka 500 to above Takka 1000. Forty six percent VEA earned upto Takka 600 (upto Rs.375), 76% of the BDO earned between Takka 801 to above Takka 1000, but it did not exceed much beyond Rs.625, 56% of the IS earned above Takka 800 to Takka 1000 and above per month. But overall their income structure rather was low as compared to their Indian counterparts.

Table 10. Description of Personal Characteristics of Extension Functionaries from the Country of Bangladesh in Number and Percentages.

86

Characteristics	VEA	BDO	IS	DEO	DA
<u>Age</u>					
20 to 25 years	135 34.70	14 14.28	9 14.28	-	-
26 to 30 years	86 22.10	117 59.09	35 55.55	-	-
31 to 35 years	47 12.08	10 5.05	10 15.87	16 88.88	-
36 to 40 years	34 8.74	4 2.02	2 3.16	2 11.11	-
41 to 45 years	25 6.42	17 8.50	5 7.93	-	-
46 to 50 years	25 6.42	20 10.10	2 3.16	-	2 66.67
Above 50 years	27 9.51	10 8.00	-	-	1 33.33
<u>Religion</u>					
Hindu					
Muslim	370 95.11	198 100.0	63 100.0	18 100.0	3 100.0
Christian	-	-	-	-	-
<u>Size of Family</u>					
Less than 3 members	22 5.65	42** 21.21	11** 17.46	4 22.22	2 66.67
3 to 5 members	84 21.60	65 32.82	28 44.44	2 11.11	1 33.33
6 to 8 members	163 41.90	51 25.75	14 22.22	5 27.27	-
9 to 10 members	60 15.43	17 8.58	6 9.52	2 11.11	-
More than 10 members	60 15.43	22 11.11	3 4.76	5 27.27	-
<u>Type of the Family</u>					
Nuclear	133 34.20	77 39.88	29 46.03	8 44.44	3 100.0
Joint (a)	142 36.50	73 36.86	27 42.85	6 33.33	-
Joint (b)	114 29.30	28 14.14	7 11.11	4 22.22	-

\*\*No children in the family. Only husband and wife living.

Table 11. Description of Professional Characteristics of Extension Functionaries from the Country of Bangladesh in Number and Percentages. 87

Characteristics	VEA N = 389	BDO 198	IS 63	DEO 18	DA 3
<u>Education</u>					
High School	373* 95.88	35 17.67	-	-	-
B.A.	2 00.05	5 2.52	4 6.34	-	-
B.Sc.	14 3.59	147 74.24	58 92.06	17 94.44	2 66.67
M.A.	-	2 1.01	-	-	-
M.Sc.	-	9 4.54	1 1.53	1 5.55	1 33.33
M.Com.	-	-	-	-	-
Ph.D.	-	-	-	-	-
<u>Training</u>					
Pre-service	264 67.86	36 18.88	5 7.93	-	-
In-service	103 26.47	162 81.81	54 85.71	18 100.0	3 100.0
No training	23 5.91	-	4 4.63	-	-
<u>Income**</u>					
Below Takka 500 (Rs.312.50)	82 21.07	16 8.08	9 14.28	-	-
Takka 501 to 600 (Rs.315-375)	99 25.44	7 3.53	9 14.28	-	-
Takka 601 to 700 (Rs.375.62-437.5)	77 19.79	11 5.55	4 6.34	-	-
Takka 701 to 800 (Rs.438.12 to 500)	88 22.62	14 7.07	6 9.52	-	-
Takka 801 to 900 (Rs.500.62 to 562.50)	38 9.77	44 22.22	8 12.69	2 11.11	-
Takka 901 to 1000 (Rs.563.12 to 625)	4 1.03	33 16.66	8 12.69	2 11.11	-
Takka 1000 and above (Above Rs.625)	1 0.25	73 36.86	19 30.15	14 77.77	3 100.0

\*40% of these respondents had one year diploma in agriculture.

\*\*One Indian rupee is equal to 1.60 Takka.

4.2 Knowledge Possessed by various levels of Extension Functionaries from the Four Eastern States of India and the Country of Bangladesh on selected aspects of Population Education.

The six aspects namely meaning and scope of population education, factors responsible for population increase etc., consequences of population growth, methods of limiting family size, ways to educate people regarding small family norms, and role of extension functionaries in imparting information regarding population education, constituted the content on which questions were asked in the multiple choice, true and false and agree/disagree forms. The range of scores was between 0 to 150 on all aspects of population education. The mean scores obtained by each level of extension functionaries on the selected aspects of population education from the four Eastern states and the country of Bangladesh are discussed in the following pages. These six aspects were further divided into 4 sub-aspects, which are shown in the following table along with the maximum scores that one could obtain in each of these. The findings of mean scores are reported in relation to these aspects.

Six selected aspects of population education	Sub-aspects of the six aspects of population education	Maximum score on each sub aspect
1. Meaning and scope of population education	1. Meaning and scope	7
	2. Demography	6
2. Factors responsible for population growth	3. Social factors	10
	4. Educational factors	8
	5. Economic factors	6
	6. Religious and cultural factors	5
	7. Physiological and physical factors	5
	8. Psychological factors	7
3. Consequences of population growth in relation to	Land and food	14
	Employment and family	11
	Housing conditions and health	18
4. Methods of limiting the family size	--	21
5. Ways to educate people regarding small family norms	--	18
6. Role of extension functionaries in imparting information regarding population problems	--	14

The finding in the section is reported comparing the mean scores of various levels of extension functionaries on 6 aspects as well as their sub-aspects.

Table 12 indicates the mean scores of extension

functionaries of Bihar. In general the director of agriculture scored highest on all aspects and sub-aspects (all most 90% score on majority of aspects except for on ways to educate people regarding small family norms (which is not very low). However, as they are not to interact with masses and not to impart training to the extension functionaries they may not need the training on any aspect at all, which means that they do not require any training in population education. As they are the policy makers they do have sound knowledge on selected aspects.

The VEAs obtained average scores on all aspects and sub-aspects except for the aspect on ways to educate people. Regarding adopting small family norm in which they scored highest amongst all, (which could be due to the reason that during their work they interact more with people directly) also their pre-service training emphasises more on extension methodology. They also interact with counterparts who are working on various concurrent programmes such as family planning. This and their experience as to which method is more practical and effective leads to their greater knowledge in this area as compared to other levels of functionaries.

As for the training need in other aspects, their need is greater in meaning and scope as compared to demography (refer Table 12). As for the second aspect, they have highest



scores in religious, cultural and psychological factors, However, their need for training in social, economic, physiological and physical factor is more as compared to educational aspect.

With regard to the third aspect, they almost had equal level of knowledge in all the three sub-aspects. In the fourth aspect, that is, the method of limiting the family size their knowledge is better as compared to other three levels of extension functionaries namely, BDO, IS and DEO. However, their scores on the sixth aspect is almost the same when compared to that of DEO and BDO. They may be coupled with other levels of functionaries for training in this aspect.

The BDOs in general scored very poor mean scores as compared to all other levels of extension functionaries. There is a greater need for training of BDOs in the first three aspects dealing with meaning and scope, factors responsible for population growth and consequences of population growth. BDO being the Block Level Officer, his knowledge on the remaining three aspects seems to be comparatively better. This is possibly because he is in-charge of programme implementation of various kinds including family planning. However, for the programme of population education there is a need for training.

Instructional staff are important functionaries in any educational programme hence it is expected that they

have better knowledge on various aspects of population education programme. The mean scores however indicated that they scored highest mean in psychological, religious as well as cultural factors. In the rest of the aspects they had average mean indicating need for training in almost all aspects. Being instructional staff it was very discouraging to observe that they obtained comparatively low mean scores on methodology which should not be the case. In their training the emphasis should be put on methodology.

DEO's performance was average on almost all aspects, but since they are the facilitators and promoters of the programme at district level they should have better knowledge and feel responsible to implement the nationally important programme. Thus they need further training.

As is evident from Table 13, VEA of Meghalaya, in general, obtained lower mean scores on various aspects of population education. They were lowest amongst all the functionaries on economic, physiological and physical factors and consequences of population growth on land and food which indicates their need for training in population education with greater emphasis on these aspects. However, on employment and family, and housing conditions and health they scored better than BDO's and IS's. Their mean scores on knowledge regarding aspects like methods of limiting family size, ways to educate people regarding adopting small

family norms and role of extension functionaries were better but further training in these aspects also will strengthen their knowledge and will equip them better to be ready to impart the knowledge.

It was the BDOs who obtained the lowest mean scores on almost all aspects. However their knowledge regarding the later 3 aspects of methods of limiting the family size, ways to educate the people regarding small family norms and role of extension functionaries were comparatively better, but they need more extensive training in the factors responsible for population growth, and consequences of population growth. It is expected that if the superiors have better knowledge, the subordinates will be encouraged by receiving right directions and facilities from the superiors.

Surprisingly enough even the instructional staff did not obtain very high scores on all aspects of population education. On the contrary, they scored even lower than VEAs in sub-aspects like educational factors, employment and family, housing conditions and health, ways to educate people regarding small family norms and role of extension functionaries. They being the trainers, if they themselves do not know, what they would teach. Thus training in all aspects of population education is needed for the instructional staff too.

The district extension officers scored highest mean scores on demography, and educational factors. It appears from the Table 13 that the DEOs needed training in social, physiological and physical factors more than in any other aspect. In general they obtained better mean scores than the previous three categories.

The directors of agriculture though scored the highest mean scores on almost all aspects of population education, ~~their~~ scores on social and educational factors were not very encouraging. As policy makers, they had knowledge but still they needed further training on factors responsible for population growth. For their training, self instructional devices might serve the purpose.

Table 14 reveals that the director of agriculture of Tripura had highest mean scores on almost all aspects of population education except on educational factors where the DEOs scored highest amongst all the extension functionaries. However, they possessed relatively poor knowledge of factors responsible for population growth. It could be argued that as they do not have to impart the education themselves they need not possess extensive knowledge in this particular area. But as they are the policy makers, it is desirable that they have better knowledge. Therefore the need of director of agriculture for further training with emphasis on factors which are

responsible for population growth.

The VEAs obtained very low mean scores on meaning and scope, demography and factors responsible for population growth, thus the need for training in these aspect is imperative. In other aspects they scored better mean scores, but just slightly. As they are the ones who are to act as catalyst, they should possess better knowledge in all aspects of population education so as to become effective teachers. Thus periodic refresher training programmes will be helpful.

The BDOs obtained lowest mean scores on physiological and physical factors, and on employment and family, and role of extension functionaries in imparting the education. Knowledge influences behavior so if the knowledge of BDOs on important aspect like role of extension functionaries is not enough, the implementation may not be successful. Thus they need exhaustive training on all the aspect. He has to encourage his team to work, hence better knowledge is needed.

The ISs scored better mean scores than VEAs and BDOs but still as educators they are not at par to be able to impart training as an effective teacher. They scored lowest on demography as compared to other extension functionaries - the fact they should know extremely well. Thus a training need in this area for this level is identified.

The DEO's scored highest mean scores on educational factors. They also attained maximum scores on meaning and scope and demography and high scores on land and food, housing conditions and health, but still training is needed on causes of population growth. It might be questioned that as they are not the ones to impart the training directly and so need no training. But since they are the providers, and implementers in their own district, they should have sufficient knowledge on all the aspects.

Director of agriculture scored highest mean scores on almost all aspects of population education barring on educational factors and housing conditions and health. Looking at their position and status and looking at the responsibility of the programme it is expected that they should have scored even better than what they have. Hence a need for a refresher training, may be, by way of self instructional programme.

Training needs in meaning and scope, demography and factors responsible for population growth is greater for the VEA's of West Bengal as is evident from Table 15. So it is true for the consequences in relation to land and food and employment and family. In the remaining aspects they obtained better mean scores. The same is true for the BDO's and IS. They have scored better mean scores than VEA's but still their performance cannot be ignored nor their need

denied if the programme is to be made successful. Their performance was average.

The director of agriculture and DEOs obtained the highest mean scores among all the other extension functionaries but still it were the DEOs who scored highest on educational factors and methods of limiting the family size. Still both the functionaries do need training on causes of population growth. As planners and policy makers they need to possess more knowledge.

It were the VEAs of Bangladesh who scored highest mean scores on land and food although they scored lowest on various other aspects of population education. They scored lowest on psychological, economic and social factors. It could be generalized that their performance was quite discouraging on factors responsible for population growth.

It was on meaning and scope of population education and sub-aspects of consequences of population growth, that the DAs scored lowest mean scores. It could be concluded that the directors of agriculture need training in meaning and scope, demography and all factors responsible for population growth. Apart from the differences in the mean scores obtained by various levels of extension functionaries it will not be exaggeration to suggest that all extension functionaries need training in the above mentioned areas. Bangladesh is

facing still greater serious problems of population growth making it imperative on the part of all the extension functionaries to be highly knowledgable in this regard.



Table 12. Mean Scores on knowledge obtained by the extension functionaries of various levels from the State of Bihar on selected aspects of population education.

Aspects of population education	VEA N = 241	BDO 60	IS 14	DEO 16	DA 1
Meaning and scope of population education	3.48	3.66	4.57	4.56	7
Demography	4.34	3.13	4.57	4.0	6
Social factors	3.07	3.25	3.0	4.0	5
Educational factors	3.12	2.70	3.70	3.75	4
Economics factors	3.28	2.90	3.42	3.62	5
Religious and cultural factors	3.00	3.00	3.00	3.00	3
Physiological and physical factors	2.35	2.41	2.42	2.62	3
Psychological factors	3.00	2.91	3.00	3.00	3
Land and food	9.98	8.50	11.14	10.57	13
Employment and family	8.04	6.46	7.85	8.50	10
Housing conditions and health	14.53	13.73	13.85	14.50	16
Methods of limiting family size	16.29	15.60	15.92	15.62	19
Ways to educate people regarding adoption of small family norm	16.29	13.96	13.28	14.31	13
Role of extension functionaries in imparting population education information	11.18	11.10	10.50	11.25	14

Table 13. Mean Scores on Knowledge obtained by the  
Extension functionaries of various levels  
from the state of Meghalaya (India) on  
selected aspects of population education.

Aspects of population education	VEA	BDO	IS	DEO	DA
N =	99	24	4	5	1
Meaning and scope of population education	4.51	4.83	5.25	6.5	7
Demography	4.00	3.70	3.75	6.00	6
Social factors	3.26	3.41	4.50	4.50	5
Educational factors	3.77	4.54	3.25	7.00	4
Economic factors	3.19	3.70	4.25	4.50	5
Religious and cultural factors	3.00	3.00	3.00	3.00	3
Physiological and physical factors	2.59	2.66	3.00	2.00	3
Psychological factors	3.00	3.00	3.00	3.00	3
Land and food	7.57	11.08	10.75	11.00	13
Employment and family	9.10	8.20	8.25	9.50	10
Housing conditions and health	15.66	14.41	13.50	14.50	16
Methods of limiting family size	16.11	15.50	16.25	17.00	20
Ways to educate people regarding adoption of small family norm	14.63	12.75	13.25	13.00	17
Role of extension functionaries in imparting population education information	11.78	11.54	10.00	12.00	12

Table 14. Mean Scores on Knowledge obtained by the extension functionaries of various levels from the state of Tripura on selected aspects of population education.

Aspects of population education	VEA N = 40	BDO 17	IS 4	DEO 3	DA 1
Meaning and scope of population education	3.77	4.52	5.25	7.00	7
Demography	3.85	4.04	3.75	6.00	6
Social factors	2.85	4.00	4.00	4.50	5
Educational factors	3.42	4.82	4.00	6.00	4
Economic factors	3.15	3.35	4.50	4.00	5
Religious and cultural factors	3.00	3.00	3.00	3.00	3
Physiological and physical factors	2.27	2.17	2.75	2.50	3
Psychological factors	3.00	3.00	3.00	3.00	3
Land and foods	10.20	11.47	12.25	12.50	13
Employment and family	7.45	7.17	8.50	9.00	10
Housing conditions and health	14.10	16.17	16.00	16.00	16
Methods of limiting family size	16.35	16.47	17.53	14.50	21
Ways to educate people regarding adoption of small family norms	14.10	13.41	13.00	11.50	18
Role of extension functionaries in imparting population education information	11.75	9.88	10.50	11.50	14

Table 15. Mean Scores on Knowledge obtained by the extension functionaries of various levels from the State of West Bengal on selected aspects of population education.

Aspects of population education	VEA	BDO	IS	DEO	DA
Meaning and scope of population education	3.50	5.00	4.51	6.84	7
Demography	3.69	4.00	4.74	6.00	6
Social factors	3.10	3.90	3.80	4.46	5
Educational factors	2.66	3.76	3.96	5.69	4
Economic factors	2.83	3.83	3.70	4.23	5
Religious and cultural factors	3.00	2.90	3.00	3.00	3
Physiological and physical factors	2.45	2.46	2.45	3.00	3
Psychological factors	2.91	2.90	3.00	3.00	3
Land and foods	9.38	11.10	11.74	13.00	13
Employment and family	6.73	8.70	8.61	9.92	10
Housing conditions and health	13.78	15.33	14.80	14.76	16
Methods of limiting the family size	15.88	16.16	16.96	18.00	17
Ways to educate people regarding adopting small family norms	14.40	13.10	13.19	14.23	18
Role of extension functionaries in imparting population education information	12.12	12.06	11.41	11.15	14

Table 16. Mean Scores on Knowledge obtained by the extension functionaries of various levels from the country of Bangladesh on selected aspects of population education.

Aspects of population education	VEA	BDO	IS	DEO	DA
Meaning and scope of population education	3.54	4.50	4.55	5.16	3.00
Demography	2.60	2.81	2.76	3.61	4.00
Social factors	2.34	3.08	2.87	3.00	3.33
Educational factors	3.77	2.68	2.42	2.50	3.00
Economic factors	3.18	3.47	3.46	3.88	4.00
Religious and cultural factors	2.77	2.87	2.87	3.00	3.00
Physiological and physical factors	2.14	2.27	2.39	2.33	2.00
Psychological factors	1.99	2.82	2.85	2.83	3.00
Land and food	11.12	10.98	10.95	10.55	7.33
Employment and family	8.49	8.64	8.73	9.16	7.00
Housing conditions and health	14.61	14.07	15.34	14.77	13.33
Methods of limiting family size	16.65	15.44	16.57	15.44	18.66
Ways to educate people regarding adopting of small family norms	13.57	13.48	13.90	13.22	12.60
Role of extension functionaries in imparting population education information	10.82	11.05	11.58	10.83	12.00

4.2.1 Distribution of Extension Functionaries from the Four Eastern States of India and the Country of Bangladesh according to their Levels of Knowledge regarding selected aspects of Population Education.

To get a clear picture as to where exactly these extension functionaries of four Eastern states and the country of Bangladesh stand in relation to their knowledge regarding population education, levels were calculated.

The total scores on knowledge was 150. To decide the level it was divided into three categories of low, average and high levels of knowledge. The respondents scoring below 50% (less than 75 scores) were put into the category of low level of knowledge, respondents scoring above 50% and upto 75% (scores above 75 but less than 113) were categorized as having average level of knowledge and above 113 it was indicated as having high level of knowledge (with a range difference of 37.5 scores).

Distribution of extension functionaries from the state of Bihar according to their level of knowledge.

More than 50% village extension agents from the state of Bihar fell in the category of average level of knowledge and slightly over 42% of extension functionaries had low level of knowledge. There were nearly negligible percentage of respondents (2.10%) who had high

level of knowledge. Surprisingly enough there was not a single respondent from the next two categories of block development officers and instructional staff who had high level of knowledge. Majority of BDO and IS had low level of knowledge.

Table 17. Distribution of respondents from State of Bihar (India) according to their levels of knowledge regarding selected aspects of population education.

Levels of extension functionaries	Low		Average		High	
	F	%	F	%	F	%
Village extension agent (N = 241)	102	42.30	134	55.60	5	2.10
Block development officer (N = 60)	46	76.77	14	23.33	-	-
Instructional staff (N = 14)	9	64.29	5	35.71	-	-
District extension officer (N = 16)	5	31.25	10	62.50	1	6.25
Director of Agriculture (N = 1)	-	-	-	-	1	100.00

In the case of district extension officers a good majority (above 60%) belonged to the category of average level of knowledge whereas above 30% had low level of knowledge, here too percentage of respondents with high level of knowledge was less (6.25%).

The director of agriculture scored high thus fell into the category of high level of knowledge.

This leads to the conclusion that all the extension functionaries from Bihar need training in population education, to enhance their knowledge so as to enable them to educate people adequately. Because low and average level of knowledge will not serve the purpose if the objective is to be achieved.

Distribution of Extension Functionaries from the State of Meghalaya and Tripura according to their Levels of Knowledge

Table 18. Distribution of respondents from states of Meghalaya and Tripura (India) according to their levels of knowledge regarding selected aspects of population education.

Levels of extension functionaries	Low		Average		High	
	F	%	F	%	F	%
Village extension Agent (N = 139)	38	27.34	97	69.78	4	2.88
Block development officer (N=41)	12	29.27	29	70.73	-	-
Instructional staff (N = 8)	3	37.5	5	62.5	-	-
District extension officer (N = 8)	-	-	8	100.0	-	-
Director of agriculture (N = 2)	-	-	-	-	2	100.00



For the purpose of statistical analysis the respondents of two states of Meghalaya and Tripura were put together, hence this information also is combined and presented together. For the state of Meghalaya and Tripura overall majority of extension functionary at all levels fell into the category of average level of knowledge. The percentage in this category of knowledge ranged from above 60% to 70% and even upto 100%. Whereas, there were less than 3% of VEA's who had high level of knowledge, there were no respondents from BDO, IS and DEO levels of extension functionary that possessed high level of knowledge.

The directors of agriculture of both the states had high level of knowledge.

Although the extension functionaries from the two states had better knowledge, the majority fell into the category of average. But they still need training, especially the instructional staff and BDO, as they are the ones who would be encouraging the VEA's to perform the task.

Distribution of Extension Functionaries from the State of West Bengal according to their Levels of Knowledge regarding Population Education:

Majority of the village extension agents (56.34%) from the state of West Bengal had low level of knowledge and the rest fell into the category of average level. Though a

good majority (80%) of block development officers had average level of knowledge. Here too none had high level of knowledge.

Table 19. Distribution of respondents from the State of West Bengal (India) According to their Levels of Knowledge regarding Selected Aspects of Population Education.

Levels of extension functionaries	Levels of Knowledge					
	Low		Average		High	
	F	%	F	%	F	%
Village extension agent (N = 42)	80	56.34	62	43.66	-	-
Block development officer (N = 30)	6	20.00	24	80.00	-	-
Instructional staff (N = 31)	7	22.58	22	70.97	2	6.45
District extension officer (N = 13)	-	-	6	46.15	7	53.85
Director of agriculture (N = 1)	-	-	-	-	1	100.00

The majority of the instructional staff also had average level of knowledge (70.97%) and very small percentage (6.45%) had high level of knowledge. District extension officers of this state, more than 50%, had high level of knowledge and the rest average level of knowledge. The director of agriculture had scored more than 75% of scores thus had high level of knowledge.

West Bengal is one of the big states with problem of over population and poverty. Thus the extension functionaries here need to be highly motivated to encourage and educate people to adopt small family norm. Looking at the status of level of knowledge possessed by extension functionaries, a comprehensive training should be organised, with periodic appraisal of the situation and proper reinforcement so that the extension functionaries work continuously to achieve the objective of educating people to adopt small family norm.

Distribution of Extension Functionaries from the Country of Bangladesh according to their Level of Knowledge.

Table 20. Distribution of respondents from the country of Bangladesh according to their levels of knowledge regarding selected aspects of population education.

Levels of extension functionaries	Low		Average		High	
	F	%	F	%	F	%
Village extension agent (N = 389)	224	57.58	164	42.16	1	0.25
Block development officer (N = 198)	97	49.00	100	50.50	1	0.50
Instructional staff (N = 63)	24	38.10	36	57.14	3	4.76
District extension officer (N = 18)	5	27.78	13	72.22	-	-
Director of agriculture (N = 3)	1	33.33	2	66.67	-	-

More than half (57.58%) of village extension agents had low level of knowledge and the percentage in the high level was very negligible (0.25% only). The rest were with average level of knowledge.

For the block level officers, the distribution was almost equal between the low and average level of knowledge (49% and 50.50% respectively), while in this category too the percentage of respondents with high level of knowledge was of no significance as it was only 0.50%.

Of course the percentage with high level of knowledge of instructional staff were relatively low (4.76%) but this was the only category which indicated high level of knowledge at the higher professional status. There were 57.14% who had average level of knowledge. Whereas none of the DEOs and DAs were found to be having high level of knowledge. Majority of these two categories belonged to the average level.

Bangladesh is facing the crisis of over population and poverty is rampant. The educational work will have to be carried out on war footing for which the extension functionaries themselves need to be highly skilled and well trained so as to perform the tasks with proper perspective. Thus a comprehensive and special training needs to be organized and imparted to the personnel belonging to these categories.

Table 21. Distribution of Extension Functionaries from  
the Four Eastern States of India according  
to their Levels of Knowledge.

Levels of Extension Functionaries	Levels of Knowledge					
	Low		Average		High	
	F	%	F	%	F	%
VEA N = 502	220	42.14	293	56.13	9	1.72
BDO N = 131	64	48.85	67	51.15	-	-
IS N = 53	19	35.84	32	60.37	2	1.53
DEO N = 37	5	13.51	24	64.86	8	21.62
DA N = 4	-	-	-	-	4	100.00

4.2.2 Relationship between the Levels of Knowledge of Extension Functionaries from Four Eastern States of India and the Country of Bangladesh and their Selected Personal and Professional Characteristics.

Knowledge according to Good (1952) is said to be the outcome of a specified rigorous inquiry, which originates within the frame work and functions in human experience. It is the product of man's intellect either within or apart from human experience.

Age, education, training, income, experience, religion etc., play a vital role in increasing awareness, information and knowledge. Some of the aforesaid characteristics were selected to test their association with level of knowledge. The significant associations are discussed in the present section.

4.2.2.1 Relationship between the Level of Knowledge of Extension Functionaries from the State of Bihar and their Selected Personal and Professional Characteristics.

All the characteristics, except for age and professional training were significantly related with level of knowledge of VEAs (Table 22). Amongst the significant ones, size of the family, type of the family, education and income were highly significant. It was found that the bigger the size of family the better was the knowledge. Joint families also were positively related, that is respondents who had joint families

Table 22. Chi-Square Values for Test of Association between the Levels of Knowledge of Village Extension Agents from the State of Bihar and the selected Personal and Professional Characteristics (N = 241).

Characteristics	Chi-Square	df.	Level of Significance
Age	4.35	6	NS
Religion	7.21	2	.05
Size of the family	152.01	8	.01
Type of the family	49.20	4	.01
Education	85.97	6	.01
Professional training	5.15	4	NS
Income	71.78	10	.01

Table 23. Chi-Square Values for Test of Association between the Level of Knowledge of Block Development Officers from the State of Bihar and the selected Personal and Professional Characteristics (N = 60)

Characteristics	Chi-Square	df.	Level of Significance
Age	15.88	3	.01
Religion	5.50	2	NS
Size of the family	3.97	3	NS
Type of the family	20.75	2	.01
Education	29.85	1	.01
Professional training	29.85	11	.01
Income	27.20	1	.01

had better knowledge. Same was found to be true in the case of education and income too. Respondents with higher level of education and higher income indicated having better knowledge.

The religion was found to be significantly related to levels of knowledge of VEA's. Although there were only two religion indicated by the respondents and the majority was of Hindus, it was indicated that Hindus had better level of knowledge.

In the case of BDO's of Bihar only, religion and size of the family were not significantly related, whereas all the rest of the characteristics were highly significant. As the age increased better was the level of knowledge. Respondents with nuclear families were found to be having better knowledge.

It was indicated that training help in improvement of knowledge, those who had training after joining their jobs had better level of knowledge. Education was positively related with level of knowledge, that is respondents having higher education had better knowledge, but it was observed that all those who had their degree in agriculture had still better knowledge. All those who had less income had low level of knowledge.

The level of instructors, except for age and income all the characteristics did not have any significant association with their level of knowledge. In these two characteristics



Table 24. Chi-Square Values for Test of Association between the Levels of Knowledge of Instructional Staff from the State of Bihar and selected Personal and Professional Characteristics (N = 14).

Characteristics	Chi-Square	df.	Level of Significance
Age	7.54	1	.01
Religion	1.14	1	NS
Size of the family	1.14	1	NS
Type of the family	1.07	1	NS
Education	1.14	1	NS
Professional training	1.14	1	NS
Income	7.54	1	.01

Table 25. Chi-Square Values for Test of Association between the Level of Knowledge of District Extension Officers from the State of Bihar and selected Personal and Professional Characteristics (N = 16).

Characteristics	Chi-Square	df.	Levels of Significance
Age	6.74	4	NS
Religion	6.47	4	NS
Size of the family	7.63	2	.05
Type of the family	7.63	2	.05
Education	7.63	2	.05
Professional training	7.63	2	.05
Income	14.67	2	.01

it was found that the level of knowledge increased as the age and income increased. Except for age and religion all other characteristics were significantly related with the level of knowledge regarding population education in the case of DEOs, and were positively associated.

The above findings lead to the conclusion that at higher level religion was not significantly related. This may be due to the fact that as the functionaries reach the senior level and their status changes, characteristics like religion do not make any difference because they are the policy makers, planners, administrators, implementators, etc. Education definitely has its impact on the level of knowledge. In most of the cases it was found that the level of knowledge increased with the level of education, which could possibly due to the fact that education helps to develop independent thinking, ability to comprehend the gravity of situation. This ability have developed the desire to learn more and more about population education, through books, magazines or through other media, resulting in more knowledge. More money provides individual an opportunity to buy books, or go to movie, buy mass media equipments, thus enhancing his knowledge.

Size of the family and type of the family might have increased the level of knowledge by providing real life experience either way thus they appreciated the small families.

Professional training as it is systematic and organized

diffusion of knowledge, was found to be significantly related in all categories except VEA's and IS. Here it may be that the VEA's do not get chance so often for training, thus cannot wait to learn for the occasion, resulted in self learning and hence better knowledge whereas for IS who are trainers themselves might have learnt on their own so as to be able to impart training to those who come for the training.

Thus it becomes imperative to consider these characteristics which are highly significant with level of knowledge and train the individuals accordingly so as to speed up the population education programme.

#### 4.2.2.2 Relationship between the Level of Knowledge of Extension Functionaries from the States of Meghalaya and Tripura and the selected Personal and Professional Characteristics.

The knowledge of village extension agents from the state of Meghalaya and Tripura was found to be significantly related to all personal and professional characteristics, except for the professional training. As the age increased the level of knowledge also increased. With the increase in education and income there definitely was increase in knowledge, whereas for the size of the family, smaller the size, better was their level of knowledge. Respondents having nuclear families had better knowledge than any other kind.

Table 26. Chi-Square Values for Test of Association between the Levels of Knowledge of Village Extension Agents from the States of Meghalaya and Tripura and selected Personal and Professional Characteristics (N = 139).

Characteristics	Chi-Square	df.	Level of Significance
Age	42.14	4	.01
Religion	9.74	4	.05
Size of the family	158.56	8	.01
Type of the family	16.06	4	.01
Education	66.40	6	.01
Professional training	4.49	2	NS
Income	17.97	2	.01

Table 27. Chi-Square Values for Test of Association between the Levels of Knowledge of Block Development Officers from the States of Meghalaya and Tripura and selected Personal and Professional Characteristics (N = 41).

Characteristics	Chi-Square	df.	Level of Significance
Age	16.53	3	.01
Religion	8.19	2	.05
Size of the family	25.60	3	.01
Type of the family	16.96	2	.01
Education	15.19	1	.01
Professional training	3.55	1	NS
Income	0.77	2	NS

In the case of block development officers of the two states the professional characteristics like income and training were found to have no significant relation with their levels of knowledge. Whereas, all the other characteristics were significantly related. Age was found to be negatively related with knowledge. For religion, all the three groups were represented but it were the Christians who had better knowledge followed by Hindus. Education was positively associated, but it was found that those who had their basic degree in agriculture possessed better knowledge. Small size of the families and nuclear type had positive association with level of knowledge.

When tests of association were computed between the level of knowledge of IS and the personal and professional characteristics, only the size of the family was related significantly. It was found that level of knowledge of IS with small families were better.

Thus it could be said that professional training was not related to the level of knowledge of extension functionaries irrespective of status. May be because these two states already were aware of the advantages of small families. Another reason could be that in these two states, some of the missionary agencies were working for quite some time, thus the interaction with them might have resulted in better knowledge.

Table 28. Chi-Square Values for Test of Association between Levels of Knowledge of Instructional Staff of Meghalaya and Tripura and selected Personal and Professional Characteristics (N = 8).

Characteristics	Chi-Square	df.	Level of Significance
Age	0.86	2	NS
Religion	1.29	1	NS
Size of the family	4.50	1	.05
Type of the family	0.72	1	NS
Education	0.50	1	NS
Professional training	0.52	1	NS
Income	0.50	1	NS

\*Test of association for district extension officer and director of agriculture was not calculated as they fell into the same category of knowledge irrespective of the variation in characteristics.

The possible reason for respondents with agricultural degree having better knowledge could be that the production, type of food, the consumption rate, the fragmentation of land and its effect on land were better understood by them. They understood the consequences of population growth thus were desirous of knowing more about population growth. They understood better and this resulted in increased knowledge. Also higher percentage of people having higher education facilitated independent reading and in turn resulted in better knowledge.

It was indicated that respondents with small and nuclear families had better knowledge. This could be because in nuclear families the freedom to decide the size of the family, use of contraceptive etc. help to realise the advantages which encouraged them to know more and more about population education, small family norms etc.

Sometimes people with small salaries get many fringe benefits thus this helps them to live their life comfortably with more opportunities to read, meet, socialize and thus learn more about the innovation like population education. These fringe benefits increase with the professional status. This may be was an operative reason at higher level of extension functionaries. As a result income was not significantly associated with the level of knowledge.

Age was significantly related with level of knowledge

of VEAs and BDOs but in the case of BDOs the association was negative. This could be due to the reason that responsibility of the position and the extent of role in implementation of the programme at that level was more operative, hence better level of knowledge.

#### 4.2.2.3 Relationship between Knowledge of Extension Functionaries from West Bengal and their Personal and Professional Characteristics.

The level of knowledge of VEA and only few characteristics were found to be significantly related. These were age, religion, type of the family and income. The age and knowledge of VEA had negative association, whereas the type of the family was positively associated. It was found that all those who had nuclear families had better knowledge and it was also indicated that with higher income there was increase in knowledge level. In religion all the three groups were indicated but it was evident that Hindus had better knowledge than the other two groups.

For the block development officers all characteristics except the size of the family, were found having significant relationship. It was found that as the age increased there was increase in knowledge. In the case of religion, it was the followers of Muslim and Christian



Table 29. Chi-Square Values for Test of Association between the Levels of Knowledge of Village Extension Agents from State of West Bengal and selected Personal and Professional Characteristics (N = 142).

Characteristics	Chi-Square	df.	Level of Significance
Age	30.28	3	.01
Religion	17.07	2	.01
Size of the family	9.28	5	NS
Type of the family	53.05	2	.01
Education	5.93	3	NS
Professional training	11.44	1	NS
Income	66.57	2	.01

Table 30. Chi-Square Values for Test of Association between the Levels of Knowledge of Block Development Officers from State of West Bengal and selected Personal and Professional Characteristics (N = 30).

Characteristics	Chi-Square	df.	Level of Significance
Age	20.03	3	.01
Religion	10.80	1	.01
Size of the family	3.13	2	NS
Type of the family	13.25	1	.01
Education	10.80	1	.01
Professional training	10.80	1	.01
Income	10.50	2	.01

religion who had better knowledge. For the type of family, it was found that those who had nuclear families had better level of knowledge. For education it could be said that it was the type of education which mattered, as all BDOs had agricultural background. They understood population education better.

In the case of IS, knowledge and religion were not found to be related. Whereas all other characteristics were related with level of knowledge. Age was found to be negatively associated with the level of knowledge. Further it was noticed that small size of the family was positively associated with the level of knowledge. Similar trend was found for the type of the family. Those having nuclear families had higher level of knowledge. Though all the instructional staff from West Bengal had the same level of education, same income and same type of training, there were differences in the level of knowledge, may be due to reasons like family background, the environment etc.

For the district extension officers of West Bengal, education was the only characteristics which was found to be significant. It was found that higher level education influenced the knowledge level. Out of 13 DEOs, 5 having Ph.D. degrees, had higher level of knowledge.

Table 31. Chi-Square Values for Test of Association between the Levels of Knowledge of Instructional Staff from State of West Bengal and selected Personal and Professional Characteristics (N = 31).

Characteristics	Chi-Square	df.	Level of Significance
Age	20.92	4	.01
Religion	1.73	4	NS
Size of the family	17.28	4	.01
Type of the family	20.97	2	.01
Education	20.97	2	.01
Professional training	20.97	2	.01
Income	20.97	2	.01

Table 32. Chi-Square Values for Test of Association between the Levels of Knowledge of District Extension Officers from State of West Bengal and selected Personal and Professional Characteristics (N = 13).

Characteristics	Chi-Square	df.	Level of Significance
Age	3.08	3	NS
Religion	0.06	1	NS
Size of the family	0.26	1	NS
Type of the family	0.06	1	NS
Education	4.66	1	.01
Professional training	0.06	1	NS
Income	0.48	1	NS

All other characteristics were found insignificantly related. The possible reason for such results could be that the position of DEOs involves a responsibility for making decision, planning, implementation and supervision. For such tasks ability to think, logically rationally and clearly is essential and this could be acquired through education to a great extent.

Conclusion in the case of extension functionaries of West Bengal could be drawn that age and religion influence the level of knowledge only upto a level. It is the position and the responsibility that influence knowledge more than age and religion. In the case of VEAs and BDOs it was positively associated. Whereas in the case of IS religion was not significantly related to knowledge.

It was observed that respondents who had small size and nuclear families had better level of knowledge. This could be because apart from the advantages like freedom they had experienced, or freedom of decision, they also experienced less of anxiety, problems and thus diverted their time to know more about population education.

It was only at the lowest or the highest level that education was not significantly related to knowledge. This may be because VEAs had already known enough about population education. With whatever education they had, they could comprehend and foresee the seriousness of the situation.

Whereas, in the case of DEOs, inspite of the fact that a good percentage of the DEOs were highly educated they felt inclined to acquire more knowledge to make the programme a success. Training also did not influence their knowledge.

In the case of EDOs and IS all professional characteristics influenced their level of knowledge. May be they were conscious of their position and role in the programme. They took advantage of all the facilities like training. They used their resources like income to inquire more knowledge, thus had better level of knowledge.

4.2.2.4 Relationship between Levels of Knowledge of Extension Functionaries from Bangladesh regarding Selected Aspects of Population Education and Personal and Professional Variables

The levels of knowledge of village extension agents of Bangladesh and all the personal and professional characteristics were highly associated except for professional training (Table 33).

Age was found to be negatively associated with level of knowledge, whereas for the size of the family, it was respondents having small families who had better knowledge, same was found to be true for the type of the family, that is those who lived in nuclear families had higher level of knowledge.

Though there were very few Hindus it was found that Hindus had better knowledge whereas for education and income it was found that as these two increased knowledge also increased. Association between training and knowledge indicated that training had a positive association though statistically it was not significant, but it was observed that all those who did not have any training at all had poor level of knowledge.

In the case of block development officers all the characteristics had positive and significant associations. For age, it was found that as the age increased, level of knowledge

Table 33. Chi-Square Values for Test of Association between Levels of Knowledge of Village Extension Agents of Bangladesh and Selected Personal and Professional Characteristics (N = 389).

Characteristics	Chi-Square	df.	Level of Significance
Age.	35.04	12	.01
Religion	152.98	2	.01
Size of the family	91.36	8	.01
Type of the family	142.23	4	.01
Education	203.31	4	.01
Professional training	7.98	4	NS
Income	85.96	12	.01

Table 34. Chi-Square Values for Test of Association between Levels of Knowledge of Block Development Officers of Bangladesh and selected Personal and Professional Characteristics (N = 198).

Characteristics	Chi-Square	df.	Level of Significance
Age	54.94	12	.01
Religion	96.08	2	.01
Size of the family	87.90	8	.01
Type of the family	112.62	4	.01
Education	40.34	8	.01
Professional training	27.40	2	.01
Income	98.83	12	.01

increased, whereas in the case of size of the family, it was found that respondents who had small families had better knowledge, same was found to be true for type of the family also. Nuclear families had better level of knowledge.

For training it was indicated that those who had in-service training they had better level of knowledge for education, and for income it was found that as education and income increased there was increase in level of knowledge.

For religion, there was only one group of Muslims, The variation here in the knowledge could be attributed to the other personal or professional characteristics.

All the characteristics were significantly associated with levels of knowledge of instructional staff. When variable of age was considered it was found that the level of knowledge increased as age increased. As for religion, when considered it was found that all were Muslims, there were variations in the level of knowledge but majority had average level of knowledge. Respondents having nuclear families had better level of knowledge and with small families even if they were not nuclear but had less children, level of knowledge was better.

The respondents having no training at all had poor level of knowledge though the percentages of such people were negligible. When pre-service and in-service training were



Table 35. Chi-Square Values for Test of Association between the Level of Knowledge of Instructional Staff of Bangladesh and selected Personal and Professional Characteristics (N = 63).

Characteristics	Chi-Square	df.	Level of Significance
Age	17.94	10	.05
Religion	26.57	2	.01
Size of the family	23.15	8	.01
Type of the family	7.54	4	.05
Education	40.19	4	.01
Professional training	38.25	4	.01
Income	34.78	12	.01

Table 36. Chi-Square Values for Test of Association between the Level of Knowledge of District Extension Officers of Bangladesh and selected Personal and Professional Characteristics

Characteristics	Chi-Square	df.	Level of Significance
Age	0.29	2	NS
Religion	3.56	1	.01
Size of the family	7.56	4	NS
Type of the family	0.88	1	NS
Education	0.19	1	NS
Professional training	3.56	1	0.1
Income	8.46	2	.05

considered, it was found that though very few people had pre-service training and majority had in-service training, the level of knowledge of extension functionaries who had in-service training was better. Higher education and higher income were positively related with higher level of knowledge.

In case of district extension officers only characteristics like religion, professional training and income were associated, for income it was indicated that as income increased the level of knowledge also increased. In-service training was the training to which all the respondents were exposed, and it was indicated that it was influencing the level of knowledge of the DEOs. All the DEOs were Muslim by religion and their knowledge was positive.

This leads to the conclusion that all those who had small families and of nuclear type had better knowledge because probably they had realised the importance of small families as they had experienced less problems, less anxiety, less complications. Also independent decision taking facility and more free time to devote to learn more might have been the facilitating factors.

Education, income and training also had their influence on the levels of knowledge. Education and training provides systematic information, ability to read and know more about the phenomenon of population education. Better income facilitates the excess to mass media, books, journals, etc.

to enhance the knowledge about population problems.

It was observed during the time of data collection that in news papers like Bangladesh Observer and New Nations are flooded by articles on different issues on population situation, population problems. Hence those who could read English, or could buy the papers might have better knowledge.

4.2.3 Comparison of the Mean Scores obtained on Knowledge by all levels of Extension Functionaries of the Four Eastern States of India and the Country of Bangladesh

For comparing the acquisition of knowledge regarding population education, mean scores on each unit separately were considered.

While comparing the two countries it was found that the extension functionaries of India (four Eastern States) performed better on first unit which comprised of meaning and scope and demography. It was the field workers, that is the VEA's, who had scored the lowest, wherein they ought to have scored higher, because it is they who will be acting as catalyst in carrying, conveying and convincing rural masses on population education.

For the second unit which consisted of the factors responsible for population increase, it was the functionaries from Bangladesh who scored better except for the category of directors of agriculture. All other categories of extension functionaries from India (four Eastern States) scored less which implied that the extension functionaries from India had relatively poor knowledge of factors which contribute towards population increase.

The problems or consequences due to increase in population were known better to VEA's, BDO's and IS's of Bangladesh

than that of India, but it was the DEO's and DA's from India who appeared informed than the DEO's and DA's from Bangladesh. Amongst all the categories from the two countries it was directors of agriculture from Bangladesh who scored the lowest, indicating that they knew relatively less about the consequences of population increase.

Knowledge regarding methods of limiting the family size did not vary much between the two countries. But it was the BDO's and DEO's of Bangladesh who obtained lower scores than any other functionaries from the two countries.

On the units of ways to educate people regarding adoption of small family norms, it was the extension functionaries from India (four Eastern States) who scored better than those functionaries from Bangladesh. Amongst all, the directors of agriculture scored least, whereas it was the instructional staff from India who scored slightly among the extension functionaries from India.

As for the mean scores on knowledge regarding roles of extension functionaries in imparting information regarding population education, it was again the functionaries from Bangladesh who scored lower than the functionaries from India (four Eastern States). VEA's and DEO's of Bangladesh were the ones who scored least, whereas IS's of India scored less than IS's of Bangladesh though the difference was very slight.

Thus it could be concluded that extension functionaries from Bangladesh had relatively poor knowledge regarding population education as compared to the extension functionaries from India (four Eastern States).

Table 37. Mean Scores obtained by various levels of Extension Functionaries of Four Eastern States of India for Knowledge regarding selected Units of Population Education.

Units of Population Education	VEA	BDO	IS	DEO	DA
Meaning and scope of population education	6.45	7.85	9.18	10.97	13.00
Factors responsible for population increase..	14.51	14.54	15.79	14.75	23.00
Problems due to increase in population.	32.57	31.88	34.49	35.51	39.00
Methods of limiting the family size.	16.23	15.82	16.67	16.48	19.25
Ways to educate people regarding adoption of small family norms	14.00	13.47	13.20	13.83	16.50
Role of extension functionaries in imparting information regarding population education.	11.55	11.24	11.00	11.32	13.50

Table 38. Mean Scores obtained by various levels of Extension Functionaries of Bangladesh for knowledge regarding selected Units of Population Education.

Units of Population Education	VEA	BDO	IS	DEO	DA
Meaning and scope of population education	6.14	7.31	7.31	8.77	9.00
Factors responsible for population increase	16.22	17.21	16.88	17.55	18.33
Problems due to increase in population.	34.23	33.70	35.03	34.50	27.66
Methods of limiting the family size.	16.65	15.44	16.57	15.44	18.66
Ways to educate people regarding adoption of small family norm.	13.57	13.48	13.90	13.22	12.66
Role of extension functionaries in imparting information regarding population education.	10.82	11.05	11.15	10.88	12.00

Comparison of Levels of Knowledge of Extension Functionaries  
among the Four Eastern States of India.

It was found that the VEA's from West Bengal had poorer level of knowledge as compared to other states. The percentage was quite high 56.34% in the category of low level of knowledge which was followed by VEA's of Bihar 42.30% in the category of low level of knowledge.

There were very low percentages of VEA's in the state of Bihar (2.10%) and Meghalaya and Tripura (2.88%) who had high levels of knowledge but no respondent in this category from the state of West Bengal had high level of knowledge.

In the category of block development officers, Meghalaya and Tripura and West Bengal had better knowledge as compared to the BDO's of Bihar where there were only about 23% of respondents who fell in the category of average level whereas in Meghalaya and Tripura 70.73% and in West Bengal it was 80% but none had higher level of knowledge. The same was found to be true for the category of instructional staff also, i.e. only about 36% instructional staff from Bihar had average level of knowledge with none in high level category, whereas, for Meghalaya and Tripura it was 62.5% in the average- and none in the high level. In West Bengal nearly 71% had average level of knowledge and 6.45% high level of knowledge. Thus for this category it was West Bengal which had a better knowledge as compared to the others.



For the other two categories too West Bengal had higher and better level of knowledge with nearly 54% DEO's having high level of knowledge and the rest average and the DA also had high level of knowledge. The knowledge level of DEO's for Meghalaya and Tripura was average for all 100% and high for all 100% director of agriculture, whereas for Bihar about 31.25% DEO's had low level of knowledge and DA of course had high level of knowledge.

Comparison of Levels of Knowledge of Extension Functionaries between India (Four Eastern States) and Bangladesh.

The overall level of knowledge regarding aspects of population education was found to be low at the village extension agents' level of Bangladesh. Majority (57.58%) clustering at low level for VEA's of Bangladesh as compared to 56.13% of average level for VEA's from India. The percentage of VEA's with high level of knowledge was very little for India (1.72%), but was still higher as compared to 0.25% of VEA's of Bangladesh falling in the category of high level of knowledge.

For the block level officers of both the countries the status of levels of knowledge was almost the same 49% and 48.85% for Bangladesh and India respectively with BDO's in both the countries falling in the category of low level of knowledge. For India, the rest 51.15% and for Bangladesh 50.50% of the block development officers had average level of knowledge.

The instructional staff of Bangladesh had slightly better knowledge as compared to ISs of India, as 57.14% had average level of knowledge and 4.76% had high level of knowledge, whereas 60.37% of ISs from India belonged to the category of average level of knowledge and only 1.53% had high level of knowledge.

The level of knowledge of district extension officers from India was definitely better than that of Bangladesh. Majority (72.22%) of Bangladesh DEOs had average level of knowledge and none having high level of knowledge whereas the BDOs of India i.e. nearly 65% had average level of knowledge and nearly 23% had high level of knowledge. Though in terms of frequency the number of DEOs of both the countries was the same, i.e. low level of knowledge. But when percentages were calculated it was Bangladesh which had greater percentage of DEOs with low level of knowledge as compared to India.

The differences in the levels of knowledge of directors of agriculture of both the countries were quite significant. 100% DAs of India had higher level of knowledge whereas none of DAs of Bangladesh fell in that category. Nearly 67% of DAs of Bangladesh had average level of knowledge and the rest belonged to the category of low level.

Thus it could be concluded that the VEAs of India and better knowledge regarding population education than VEAs

of Bangladesh. There was no significant difference in the knowledge among the BDO's of the two countries.

The instructional staff of Bangladesh possessed better knowledge than the IS of India. But the reverse was the case for district extension officer.

The differences in knowledge of DA's were quite significant. DA's of India had much better knowledge than the DA's of Bangladesh.

4.2.4 Differences between the Levels of Knowledge regarding Selected Aspects of Population Education of the Extension Functionaries among the Four Eastern States of India and the Country of Bangladesh.

To find out the differences in knowledge between each level of extension functionaries among the four Eastern states of India, 't' tests were computed for each category.

It was found that there was a significant difference in the knowledge of village extension agents among the four Eastern states. When the differences were calculated between the knowledge of VEAs of West Bengal and Meghalaya and Tripura it was found to be highly significant (Table 39). The same was the case with VEAs of Bihar, Meghalaya and Tripura. Differences were significant between the states of West Bengal and Bihar too. From the mean it appears the VEAs of Meghalaya and Tripura had better knowledge than the VEAs of the other two states.

This difference could be due to their socio-cultural conditions, education or family background or the training imparted to them. Amongst all, Bihar had scored least which could be due to personal characteristics or the inadequate training given to them.

The differences between the block development officers were found insignificant (Table 39) when the knowledge of BDOs of West Bengal and Meghalaya and Tripura were considered.

Table 39. Differences in Levels of Knowledge possessed by various Levels of Extension Functionaries from the Four Eastern States of India regarding Population Education.

Level of Extension Functionaries	Mean 1	S.D.	Mean 2	S.D.	't' value	df.	Remarks
<b>Village Extension Agents:</b>							
West Bengal + Meghalaya and Tripura N = 142	96.59	13.37	94.05	5.90	5.1303242		.01
West Bengal + Bihar N = 142 + 241	95.59	13.37	99.39	14.72	1.9097422		.05
Bihar, Meghalaya and Tripura N = 241 + 139	99.39	14.72	104.09	9.90	3.7050513		.01
<b>Block Development Officers:</b>							
West Bengal, Meghalaya and Tripura N = 30 + 41	105.23	8.17	102.68	8.98	1.2453906		NS
West Bengal, Bihar N = 30 + 60	105.23	8.17	93.35	12.19	5.4785392		.01
Bihar, Meghalaya and Tripura N = 30 + 41	93.35	12.19	102.68	8.98	4.4262265		.01
<b>Instructional Staff:</b>							
West Bengal, Meghalaya and Tripura N = 31 + 8	105.96	7.93	105.00	8.06	0.3035645		NS
West Bengal, Bihar N = 31 + 14	105.96	7.93	99.14	24.11	1.0339261		NS
Bihar, Meghalaya and Tripura N = 14 + 8	99.14	24.11	105.00	8.06	0.8310502		NS
<b>District Extension Officers:</b>							
West Bengal, Meghalaya and Tripura N = 13 + 8	117.30	9.99	112.25	4.30	1.600206		NS
West Bengal and Bihar N = 13 + 16	117.30	9.99	103.18	11.63	3.5155981		.01
Bihar, Meghalaya and Tripura N = 16 + 8	103.18	11.63	112.25	4.30	2.761839		.05

Whereas the difference in knowledge between Bihar and West Bengal and Bihar and Meghalaya were highly significant. This could again be ascertained from the differences in the means of the states. These differences could be attributed to the area in which they were working, communication facilities etc. Some parts of Bihar are so remote that communication is very difficult.

The differences among the instructional staff between the states were not significant (Table 39). This could be because all the training centers were run from the state headquarters and from the Central Government. All policy decisions were taken and instructions issued to these centers from the State Headquarters. All the instructors were trained at some of the national extension training centres. All the circulars, literature etc. on innovation like population education were sent to all the training centres from the central office through the state Governments.

There was no significant difference between the knowledge of district extension officers from the states of West Bengal, and Meghalaya and Tripura. Whereas, the difference between the knowledge of DEOs from West Bengal and Bihar was found to be highly significant. The difference were significant between Bihar, Meghalaya and Tripura too.

The reason possibly could be that Bihar, a very big state, faces the problems of poverty most because the agri-

cultural production every year is affected by draught. Thus all their energies and attention had been diverted to increase the agricultural produce. They do not concentrate on educating people about population education.

Thus the findings lead to the conclusions that the state of Bihar had less knowledge at all levels of extension functionaries except for instructional staff. It also had the maximum problems of over population, illiteracy, unemployment, poor agricultural product due to draught, etc.

West Bengal, though relatively better, follows next, whereas Meghalaya and Tripura appear to be the best in knowledge as compared to other states.

Differences in Knowledge Possessed by Various Levels of Extension Functionaries from India (four Eastern States) and Bangladesh regarding Population in Education.

Table 40 indicates that the differences are not significant between the two countries at various levels except for the directors of agriculture. From the means, it is evident that directors of agriculture from Bangladesh had poor knowledge. This difference could be due to their level of education, their extent of involvement in imparting population education or making policy decision. As it was observed by the investigator while collecting the data that the decision regarding policy to induct population education in

Table 40. Differences in Level of Knowledge Possessed by Various Levels of Extension Functionaries from the Four Eastern States of India and Country of Bangladesh regarding Population Education.

Levels of extension functionaries	Mean		't' values	df	Remarks
	$M_1$	S.D.	$M_2$	S.D.	
Village Extension Agents N = 389 + 522	99.88	22.21	97.65	14.90	0.2473813 NS
Block Development Officers N = 198 + 131	98.99		98.22	16.12	0.2270967 NS
Instructional Staff N = 53 + 63	104.01	10.91	100.87	16.17	1.2433139 NS
District Extension Officer N = 37 + 18	110.10	22.22	100.33	18.26	1.7025331 NS
Director of Agriculture N = 4 + 3	124.25	3.65	98.33	10.21	4.1955005 .05 level



agricultural extension work was taken by the Government but all planning, organizing, and training was guided by the UN agencies through Agricultural Extension training centers and thus the directors of agricultural were involved to a small extent.

It is generally assumed that as the age advances the experience also increases. This enhances the knowledge. With responsible position where one is required to make decision, and implement the programmes, maturity did have its influence. It was found in the present investigation that in majority of the cases - BDO, IS, DEO, and DA, as the age increased their level of knowledge also increased. All extension functionaries of these levels were decision makers, implementers, policy makers and they were supposed to have better level of knowledge, to be able to carry out the responsibility successfully.

From the mean scores also it was apparent that the higher level of extension functionaries had obtained higher mean scores in majority of the cases. In some cases the findings were contrary to the assumption. In the case of VEAs, it was found that those who were young had better knowledge, indicating thus that VEAs who were young in age were more open, alert and receptive and indicated readiness to learn. Thus it is suggested that for the posts of VEAs such youngster be identified and selected for training. Their better level of knowledge also could be attributed to their varied interests, interaction with people, and interest in literature.

In religiously dominant countries like India and Bangladesh, it was expected that religion will influence

the knowledge of respondents. It can not be generalized that the followers of a particular religion have better knowledge but it is the religious beliefs and values which definitely make an impact. Between the two countries, India had Hindus in Majority but Christians and Muslims were also represented, whereas in Bangladesh a vast majority were only Muslims.

It was found that Hindus had better level of knowledge followed by Christians as compared to Muslims. This could be due to the general feeling amongst Muslims that their religion forbids contraception and family planning. Thus they were less inclined to respond to population education.

Nag (1973) and Mohmad (1977) studied the fertility aspect keeping religion in mind. Nag found that Hindus practiced more of abstinence, because the importance was related to spiritual reason apart from physical reason. Whereas Mohmad found that the feeling of minority consciousness and minority status were more operative among Muslims and their attitude towards fertility was accordingly conditioned. Keeping these factors and findings of the present study, during training, religious aspect could be elaborated to overcome the feeling.

Size of the family and type of the family were found to be significantly related in many cases. In the case of VEAs of Bihar it was found that the bigger the size of the family better was the level of knowledge. This could possibly be due

to the fact that difficulties of having large and joint families gave them first hand experience. Bebarta (1974) also found that joint family did not promote fertility. This impedes their desire to learn more and more about population education. Joint families have their own disadvantages. (If the responsibilities to run the household are shared, it outweighs the problems.) Another reason for having better knowledge in joint families could be that as the number of adults in a family increases, the chances of interaction, access to literature also increase. Hence better knowledge.

In majority of the cases it was found that small and families nuclear in nature, had better level of knowledge. Small families had fewer problems of sickness, food, clothing, education etc. Small families also provided an individual tension free time to divert and engage his energies to acquire more information about the phenomenon of population education. Sreenath, Kumar and Wadia (1978) found in their study that small families with fewer number of children definitely had fewer problems. Thus this aspect could be highlighted in the training programme and functionaries be motivated to accept the fact that small families are better.

Education and knowledge are directly related and is an irrefutable fact. It was found that the higher the education



the better was the level of knowledge. Education enables one to think logically, critically and rationally. It makes one independent and if one desires to learn more, has an access to the printed media. Educated person can accentuate his knowledge regarding the population education. Education also creates the awareness of physical environment and helps individual to see through for future. But it is also the type of education which plays an important role. It was found that those who had agricultural degree had better knowledge because they could understand, comprehend, and recognize the consequences of population growth as related to food production, the quality of consumption, employment etc. where their knowledge was better.

Training is systematic dissemination of information or knowledge. It certainly will increase the level of knowledge of its recipients. In majority of the cases it was found that training increased the knowledge. Rao (1972) and Ramchandran (1974) also found that training increased the awareness and knowledge of participants.

Income has indiscernible yet indisputable relation with knowledge. People with higher income have greater, easier access to mass-media. Thus their exposure to the message of population education is definitely more extensive. It was found that respondents who had better income had better knowledge.

4.3 Mean Scores on Attitudes obtained by the Extension  
Functionaries from the Four Eastern States of India  
and the Country of Bangladesh towards Selected  
Aspects of Population Education

Attitude is a mental or neural state. It is a personal disposition common to individuals but possessed in different degrees which impels them to react to any object, situation, or proposition in ways that can be called favourable, unfavourable, etc. Attitude influences decision to a great extent. Thus it becomes imperative to study attitude towards a phenomena or an innovation which needs to be ingrained in the duties, of any professional person, for the successful adoption of the innovation.

The study of attitudes of extension functionaries towards population education, apart from many other reasons was undertaken to know how they feel towards this innovation. The responsibility to carry forward the information of population problems and educate rural masses in population education has been recommended to be inducted in the job charts of extension functionaries. A great deal of misunderstanding prevails about population education and family planning. Population education is most often confused with family planning education and thought as a sophisticated new name for family planning.

The attitudes regarding selected aspects of population education were studied on a continuum of 5 points, ranging

from 1 to 5, reflecting strongly agree to strongly disagree responses.

4.3.1 Table 41 indicates that there was a vast difference in attitudes of all levels of extension functionaries towards the items on the meaning and scope of population education. VEAs in general indicated more positive attitudes, except for the item - population education contributing towards formation of positive attitudes towards adoption of small family norm. The block development officers and district extension officers indicated that they thought population education as another name for sex education, and disagreed that it could bring awareness regarding population problems.

However, there was agreement on one item irrespective of state or status that is, to educate people in population problems was a gigantic task and that it cannot be achieved in a short time.

The instructional staff who are the educators, and the directors of agriculture of all the states indicated positive attitude, which to some extent appears to be reassuring that those who are policy makers for the state and trainees possessed positive attitude. This should certainly help in promoting population education as a national programme.

It is revealed from Table 42, that district extension officers and the directors of agriculture of all the states

scored high thus having positive attitudes towards the social factors responsible for population increase.

The VEA, BDO, IS and DEO of Meghalaya, Tripura and West Bengal indicated no influence of customs and traditions of society on individual's decision regarding the size of family.

The block development officers of Tripura and West Bengal scored very low on all the items leading to the conclusion that they had negative attitude towards some of the social reasons which contribute towards the population increase.

All the extension functionaries irrespective of status and state indicated their awareness and agreement that early marriages do not do any good for the development and progress of a developing country (Table 42).

On the economic factors which cause population growth it were the VEA and BDO of all states who scored low scores indicating their negative attitude. The instructional staff of Bihar did not score high on item like children bring satisfaction at present and money in future. Even the directors of agriculture of Tripura, Meghalaya and West Bengal were indecisive.

Majority of the respondents from all the four states disagreed that large families are economic burden.

Table 44 indicates that it were the BDOs of Meghalaya,



Tripura and West Bengal who scored low scores. Whereas all extension functionaries except for the directors of agriculture of the four states scored very low on items of education, family life and the number of children. The same was observed to be true for almost all extension functionaries for the item "Society is responsible for education and therefore the number of children does not matter."

If the extension functionaries who are to impart education to rural masses, possess negative attitude towards the role of education in adoption of small family norm, the task of motivating rural people who in majority are illiterate, would be difficult. Also if they do not have much knowledge about the consequences of large families, their message to adopt small family norm will not be received favourably.

Table 45 reveals that VEAs and BDOs of Meghalaya, Tripura and West Bengal, and BDOs of Bihar scored very low scores on all items of religious and psychological factors which influence population growth. The scores of ISs of Bihar and of DEOs of Meghalaya, Tripura and West Bengal were not very impressive either. In general, the trend was found to be negative, implying that they did not agree with the argument that religious and psychological reasons contribute to population increase.

Almost all believed and agreed that if married people refrain from sex for long, it will affect health, and the

use of contraceptive will lead to mental tension in man. Since this is the state of affair, planning for educating people on small family norm needs to be more comprehensive and the extension functionaries should be educated first, before they go to the field.

All the extension functionaries irrespective of state and status scored very low (Table 46) on statement like rich and spicey food increases the sexual urge resulting in rapid population growth. This may be due to traditional belief and something to that effect printed in literature.

It were the extension functionaries from Bihar who disagreed that the process of conception should be explained to the boys and girls. It was only the functionaries of Tripura who in majority agreed. This was in the line of thinking of other educationists and experts on population education that if younger generation is explained the process of conception population growth could be curbed down to some extent.

In general, the trend was observed to be from negative to indecisive as indicated in Table 47 on consequences of population growth on land and food. Amongst all, the extension functionaries of West Bengal had scored very low. Almost all the extension functionaries of the four states agreed that modern farm technology will solve the problem of food and

Import of food grains could be another answer for shortage of food. They did not feel the need to check population growth.

It is observed from Table 48 that majority of the respondents from the four states did not have positive attitude towards importance of good nutrition during the pre-natal and post-natal period. A good majority also did not realise the effect of frequent pregnancies on the health of the mother and family. Otherwise in general they did agree that population growth affects the quality and quantity of food available to people for consumption.

Table 49 reveals that almost all extension functionaries of the four states scored low by agreeing that if women and underage children in a over-populated country are not employed it will solve the problems of unemployment to an extent, which apparently can not be the solution. They further indicated their indecisiveness on role of rural industries in solving the unemployment problem, which leads to the conclusion that they were not aware of the actual causes of unemployment. This calls for intensive education on this aspect.

Table 50 indicates that majority of extension functionaries appeared to be hesitant on the statement that planned families enable to maintain a good standard of living. Also they appeared to be indecisive about role of birth control measures in producing abnormal babies and also about the

family planning, its importance and the extent to which education on family planning should be imparted.

In general, their scores on attitude regarding adoption of small family norms through education in family planning methods were quite discouraging.

It were mainly the directors of agriculture who scored high in general, on all statements. Amongst them too it was the director of agriculture of West Bengal who indicated more positive attitudes. However, the director of agriculture of Tripura appeared to be little reluctant, because his score of an average mean of 3 on many items.

Majority of the extension functionaries of the four states appeared to be having positive attitudes towards role of extension functionaries in imparting population education as indicated in Table 51. But they seemed to be reluctant about the extent to which they can educate people on population problems, or rather they were hesitant about mentioning family planning as one way of curbing the population growth.

The overall trend seemed negative when specific questions were considered, such as, rural people have full faith in extension agents, they can motivate the rural people to adopt small family norms; or as the extension agents have a good rapport

they can motivate rural people to adopt small family norm.  
The directors of agriculture of Bihar and Tripura also  
appeared to be unclear and undecided.

Table 41. Average and Mean Scores on attitude statements on meaning and scope of population education obtained by the extension functionaries from the four Eastern States of India.

Meaning and Scope	BIHAR					MEGHALAYA					TRIPURA					WEST BENGAL				
	VEA	EDO	IS	DEO	DA	VEA	EDO	IS	DEO	DA	VEA	EDO	IS	DEO	DA	VEA	EDO	IS	DEO	DA
	N = 241	60	14	16	1	99	24	4	5	1	40	17	4	3	1	142	30	31	13	1
1. Population education is another name for sex education.	3.43 (827)	2.43 (146)	4.0 (56)	2.43 (39)	4	4.0 (396)	2.54 (61)	3.25 (13)	2.3 (14)	4	3.82 (153)	3.52 (60)	3.5 (14)	3.33 (10)	4	4.01 (570)	2.10 (81)	4.06 (126)	1.84 (24)	4
2. Population education is a process to bring awareness about population problems.	4.02 (969)	3.0 (211)	5.0 (70)	2.38 (43)	4	4.06 (402)	2.58 (62)	5.0 (20)	3.6 (18)	4	4.0 (160)	4.5 (69)	5.0 (20)	4.33 (13)	4	4.80 (683)	2.20 (86)	3.3 (123)	1.81 (34)	4
3. Population education programme should be given top priority amongst the development programme e.g. agriculture, education, health etc.	4.99 (1204)	3.51 (294)	3.71 (52)	5.0 (80)	4	4.39 (435)	4.04 (97)	4.5 (18)	5.0 (25)	4	4.47 (179)	3.70 (63)	4.75 (19)	4.0 (12)	4	4.29 (610)	3.23 (97)	4.03 (127)	4.0 (52)	4
4. Population education programme is a significant task and cannot be achieved in a short period.	4.55 (1088)	4.48 (269)	5.0 (70)	4.3 (65)	5	4.14 (410)	4.5 (108)	5.0 (20)	5.0 (25)	5	5.0 (200)	4.11 (70)	5.0 (20)	4.66 (14)	3	5.0 (710)	4.0 (120)	5.0 (155)	5.0 (65)	4
5. Population education is a welfare programme.	4.09 (986)	5.0 (300)	4.71 (66)	5.0 (80)	4	4.97 (493)	3.25 (78)	5.0 (20)	4.0 (20)	5	4.65 (186)	4.23 (72)	5.0 (20)	3.66 (11)	4	4.56 (648)	3.86 (116)	4.12 (128)	4.92 (64)	4
6. Population education helps forming positive attitudes towards adopting small family norms	2.21 (535)	4.05 (243)	4.21 (59)	3.56 (57)	4	3.22 (319)	4.12 (99)	4.75 (19)	2.8 (15)	5	2.82 (113)	3.05 (52)	4.75 (19)	2.0 (6)	4	1.48 (211)	3.80 (114)	4.0 (124)	4.78 (62)	4

Table 42. Average and Mean Scores obtained on attitude measurements on social factors responsible for population increase by extension functionaries from the Poor Eastern State of India.

[illegible]

Table 41. Average and Mean Scores obtained on attitude statements by extension functionaries from  
Four Eastern States of India in economic factors responsible for population increase.

	BIHAR				MEGHALAYA				TRIPURA				WEST BENGAL			
	VEA	DC	DA	IS	VEA	DC	DA	IS	VEA	DC	DA	IS	VEA	DC	DA	IS
N =	24	60	14	16	1	99	24	4	5	1	40	17	4	3	1	142
1. Big family means more earning hands and more prosperity.	3.13 (155)	3.4 (204)	3.42 (51)	3.0 (43)	4.0 (20)	3.22 (319)	3.29 (79)	4.75 (13)	4.0 (20)	4.0 (15)	3.29 (56)	4.25 (17)	3.33 (13)	2.92 (116)	3.03 (71)	4.41 (117)
2. Larger families provide better help for farming, thus more production and better economic status.	4.57 (1102)	2.93 (176)	3.78 (53)	4.25 (68)	3.6 (18)	2.49 (247)	2.53 (62)	4.5 (13)	3.6 (18)	3.6 (13)	3.41 (58)	4.25 (17)	3.66 (11)	2.8 (398)	2.85 (36)	4.06 (126)
3. Children bring satisfaction at present and money in future.	3.74 (907)	2.01 (121)	3.55 (47)	4.37 (70)	4.2 (21)	4.02 (398)	3.45 (83)	5.0 (20)	4.2 (21)	2.0 (80)	2.75 (40)	4.75 (13)	2.66 (8)	2.59 (368)	3.1 (53)	2.54 (79)
4. Large family with small income becomes a burden	1.21 (294)	4.71 (283)	3.57 (50)	5.0 (90)	5.0 (25)	4.01 (397)	3.7 (89)	4.25 (17)	5.0 (25)	2.55 (102)	2.52 (43)	3.75 (15)	5.0 (15)	4.47 (636)	3.23 (97)	4.61 (143)
5. Large families will have many earning members in the family thus better economic status.	3.0 (723)	1.6 (96)	1.92 (27)	3.56 (57)	4.0 (20)	2.23 (226)	1.5 (36)	3.75 (15)	4.0 (20)	2.45 (98)	1.94 (33)	4.0 (15)	5.0 (15)	1.85 (254)	1.7 (51)	3.32 (103)



Table 44. Average and Mean Scores obtained by extension functionaries of Four Eastern States of India on items of educational factors.

	BIHAR				MEGHALAYA				TRIPURA				WEST BENGAL							
	VEA	BDO	IS	DA	VEA	BDO	IS	DA	VEA	BDO	IS	DA	VEA	BDO	IS	DA				
N =	241	60	14	16	1	99	24	4	5	1	40	17	4	3	1	142	30	31	13	1
1. Society is responsible for education and therefore whether they have two or ten children is not a matter of concern.	3.61 (872)	2.15 (129)	2.78 (31)	3.63 (59)	4	3.22 (319)	2.37 (57)	4.75 (19)	2.8 (11)	4	3.37 (135)	3.5 (62)	4.25 (17)	4.0 (12)	4	3.44 (489)	1.9 (57)	4.32 (134)	3.23 (42)	4
2. Educated people can take better decision regarding limiting the size of family because they can think advantages and disadvantages of large family.	3.95 (954)	7.5 (210)	5.0 (70)	4.75 (76)	5	4.01 (397)	3.29 (79)	4.5 (18)	4.6 (25)	5	4.0 (160)	4.05 (69)	5.0 (20)	5.0 (15)	5	4.0 (568)	3.46 (104)	4.8 (149)	4.69 (61)	5
3. Increase in population increases the competition for admission in schools and colleges.	4.98 (1201)	4.11 (247)	3.07 (43)	5.0 (80)	5	4.29 (425)	3.66 (88)	5.0 (20)	4.3 (24)	4	4.25 (170)	3.7 (63)	5.0 (20)	4.33 (13)	4	2.91 (414)	2.4 (69)	4.09 (127)	4.84 (63)	5
4. People with low literacy are usually superstitious and fatalistic regarding the number of children.	4.2 (1013)	5.0 (300)	4.78 (67)	4.93 (79)	4	4.63 (459)	3.53 (86)	5.0 (20)	5.0 (25)	4	4.72 (189)	3.52 (60)	5.0 (20)	5.0 (15)	4	3.54 (503)	4.3 (129)	5.0 (155)	5.0 (65)	5
5. Even after education there is no employment, thus no need to spend on education.	3.96 (956)	4.55 (273)	3.64 (11)	4.25 (68)	5	3.6 (357)	3.62 (87)	5.0 (20)	4.0 (20)	4	4.07 (173)	2.52 (43)	5.0 (20)	3.0 (9)	4	3.1 (442)	3.2 (96)	3.74 (116)	3.78 (49)	5
6. Education, family life and number of children has no relation.	1.0 (241)	1.76 (406)	2.78 (39)	2.63 (43)	5	1.06 (105)	2.0 (48)	3.5 (14)	2.0 (10)	4	3.0 (120)	2.76 (47)	3.75 (15)	3.0 (9)	4	3.67 (522)	3.26 (98)	2.87 (89)	3.46 (45)	5

Educational Factors

Table 45. Average and Mean Scores on the attitude statements on religious and psychological factors obtained by the extension functionaries from the Four Eastern States of India.

	BIHAR				MEGHALAYA				TRIPURA				WEST BENGAL							
	VEA	BDO	IS	DA	VEA	BDO	IS	DA	VEA	BDO	IS	DA	VEA	BDO	IS	DA				
N =	241	60	14	16	1	99	24	4	5	1	40	17	4	3	1	142	30	31	13	1
<b>Religious and Psychological Factors</b>																				
1. Trying to restrict the number of children is interfering the nature.	3.31 (799)	3.48 (209)	3.42 (48)	2.56 (41)	3.05 (302)	1.91 (46)	4.75 (10)	2.6 (13)	3.02 (121)	3.52 (60)	4.5 (18)	3.66 (11)	2.78 (395)	2.76 (83)	3.83 (119)	4.61 (60)	---			
2. A woman who conceives immediately after an unsuccessful pregnancy will produce a son.	4.7 (1133)	2.5 (114)	2.5 (36)	2.43 (39)	3.62 (299)	2.83 (63)	4.0 (16)	2.8 (14)	2.75 (110)	3.58 (61)	4.75 (19)	3.0 (9)	1.5 (214)	1.63 (49)	2.74 (85)	1.69 (22)	4			
3. Marriages are made only to produce progeny.	4.19 (1010)	2.93 (176)	3.32 (55)	5.0 (80)	3.46 (343)	3.62 (87)	5.0 (20)	4.0 (20)	3.47 (139)	3.64 (62)	5.0 (20)	5.0 (15)	4.57 (649)	3.5 (105)	5.0 (155)	5.0 (65)	5			
4. Many children to a woman is God's blessing.	4.98 (1201)	4.11 (247)	3.57 (50)	4.56 (75)	4.13 (409)	3.12 (75)	5.0 (20)	4.0 (20)	3.37 (135)	2.0 (34)	4.5 (18)	4.0 (12)	4.05 (576)	3.73 (112)	4.9 (152)	5.0 (65)	5			
5. Using artificial means to prevent or terminate pregnancy is insulting God.	1.6 (386)	2.31 (139)	4.23 (60)	4.31 (69)	3.24 (321)	3.08 (74)	4.5 (18)	3.5 (18)	2.0 (80)	1.83 (32)	5.0 (20)	3.66 (11)	2.27 (323)	2.53 (76)	3.32 (103)	3.23 (42)	5			
6. Use of contraceptive will lead to mental tension in a man.	2.05 (496)	1.98 (119)	4.5 (63)	4.75 (76)	3.19 (316)	1.79 (43)	3.75 (15)	2.6 (13)	3.0 (120)	2.29 (39)	4.75 (19)	3.0 (9)	1.8 (256)	2.2 (66)	3.64 (113)	3.23 (42)	4			
7. A couple if refrain from sexual relations for long will have ill-effects on health.	2.36 (569)	3.8 (228)	1.92 (27)	2.87 (46)	1.61 (160)	3.29 (79)	4.25 (17)	3.6 (18)	2.37 (95)	2.76 (47)	4.0 (16)	4.0 (12)	3.54 (504)	1.63 (50)	2.9 (90)	4.34 (63)	4			

Table 46. Average and Mean Scores on attitude statements on physiological and physical factors contributing to population increase obtained by the extension functionaries of the Four Eastern States of India.

	BIHAR				MEGHALAYA				TRIPURA				WEST BENGAL						
	VEA	BDO	IS	DA	VEA	BDO	IS	DA	VEA	BDO	IS	DA	VEA	BDO	IS	DA			
N =	241	60	14	16	1	99	24	4	5	1	40	17	4	1	142	30	31	13	1
Physiological and Physical Factors																			
1. Rich fried food increases the urge for sex relations which results in more children.	1.02 (248)	2.91 (175)	1.64 (23)	2.37 (38)	5	1.35 (134)	2.29 (55)	5.25 (13)	2.2 (11)	3	2.1 (84)	2.23 (38)	2.2 (11)	1 (9)	1.25 (178)	1.73 (52)	2.38 (74)	2.38 (31)	2.38 (4)
2. A girl married at an early age will have more children.	4.99 (1203)	4.75 (285)	3.73 (53)	5.0 (80)	5	4.93 (489)	4.58 (110)	4.5 (18)	5.0 (25)	4	5.0 (200)	4.05 (69)	5.0 (20)	5.0 (15)	5.0 (710)	4.76 (143)	5.0 (155)	5.0 (65)	5.0 (4)
3. Girls and boys should be explained the process of conception.	3.94 (950)	2.43 (146)	2.71 (38)	3.93 (65)	5	3.88 (385)	3.75 (90)	4.0 (16)	5.0 (25)	4	4.0 (160)	4.0 (68)	4.0 (16)	3.66 (11)	3.61 (513)	2.3 (69)	3.57 (114)	4.76 (62)	4 (4)

Table 47. Average and Mean Scores on attitude statements on problems of land and food as a consequence of population growth, obtained by extension functionaries of four Eastern States of India.

	BIHAR				MEGHALAYA				TRIPURA				WEST BENGAL			
	VBA	BNO	IS	DA	VBA	EDO	IS	DA	VBA	BNO	IS	DA	VBA	EDO	IS	DA
N = 241	241	60	14	16	1	99	24	4	5	1	40	17	4	3	1	142
1. With increase in population there is increase in land utilization for roads, houses, schools and hospitals. etc..	4.31 (1039)	4.38 (293)	4.71 (66)	4.81 (77)	4	4.9 (4.5)	4.08 (93)	5.0 (20)	5.0 (25)	4	4.3 (172)	3.52 (50)	5.0 (2)	5.0 (15)	4	3.93 (559)
2. Each resource has its limitations so is with land, we cannot go on adding pressure to produce more food.	4.06 (379)	4.1 (240)	2.85 (40)	4.93 (79)	5	4.12 (408)	3.16 (76)	5.0 (20)	4.5 (24)	1	3.77 (151)	3.64 (62)	4.53 (18)	5.0 (15)	4	3.59 (510)
3. Food production should increase in equal ratio as the population grows	4.58 (1104)	2.85 (171)	2.71 (38)	5.0 (80)	5	4.0 (396)	3.87 (93)	4.0 (16)	4.6 (23)	4	3.37 (135)	2.94 (50)	4.25 (17)	5.0 (15)	4	3.21 (456)
4. Modern farm technology will solve all the problems of food shortage.	1.94 (469)	3.21 (193)	3.42 (48)	3.31 (53)	4	3.22 (319)	2.0 (48)	2.5 (10)	3.8 (13)	1	3.27 (131)	4.17 (71)	3.0 (12)	3.33 (10)	4	3.09 (439)
5. Food grains could always be imported from the countries where there is more food.	3.26 (788)	1.43 (88)	3.28 (46)	2.62 (42)	5	3.94 (391)	1.7 (41)	2.75 (11)	2.4 (12)	4	2.25 (90)	2.0 (34)	3.75 (15)	5.0 (15)	4	2.9 (413)
6. Large families leave literally nothing for investment on the farm to improve the production.	1.46 (352)	3.36 (202)	3.78 (53)	3.62 (58)	4	3.29 (326)	3.37 (93)	4.5 (13)	4.0 (20)	4	2.5 (100)	2.52 (43)	5.0 (20)	5.0 (15)	4	2.02 (287)

Table 48. Average and Mean scores on attitude statements on problem of family and health as a consequence of population growth, obtained by the extension functionaries of the Four Eastern States of India.

	BIHAR				MEGHALAYA				TRIPURA				WEST BENGAL			
	VEA	BDO	IS	DEO	VEA	BDO	IS	DEO	VEA	BDO	IS	DEO	VEA	BDO	IS	DEO
	DA	DA	DA	DA	DA	DA	DA	DA	DA	DA	DA	DA	DA	DA	DA	DA
N =	241	60	14	16	99	24	4	5	40	17	4	3	142	70	31	13
1. Due to increase in population the quantity and quality of food consumed does not give enough energy, which affects health.	4.66 (1125)	5.0 (300)	5.0 (70)	5.0 (80)	5.0 (495)	4.91 (118)	5.0 (20)	5.0 (25)	5.0 (200)	4.7 (80)	5.0 (20)	5.0 (15)	4.7 (58)	4.96 (149)	5.0 (155)	5.0 (65)
2. Due to increase in population the increase of malnutrition and undernutrition is wide among children, pregnant and lactating mothers as the availability of food is less.	4.07 (983)	5.0 (300)	5.0 (70)	4.93 (79)	3.89 (386)	4.5 (108)	5.0 (20)	4.6 (23)	4.95 (198)	4.7 (71)	5.0 (20)	5.0 (15)	3.47 (494)	4.2 (126)	4.96 (154)	5.0 (65)
3. The shorter the interval between two pregnancies higher are the percentage of malnourished mother and children.	3.54 (866)	4.1 (246)	3.07 (43)	4.1 (67)	3.22 (319)	3.7 (95)	5.0 (20)	4.0 (20)	3.57 (143)	3.7 (71)	5.0 (20)	5.0 (15)	4.3 (612)	2.3 (69)	4.64 (144)	3.92 (51)
4. Sixty to 70 percent of brain and other development takes place in early stage, thus proper diet for pregnant and lactating mothers is essential which is not available due to population increase.	3.31 (980)	1.95 (117)	2.28 (32)	3.93 (63)	3.0 (237)	3.22 (79)	3.5 (14)	3.0 (15)	3.27 (131)	3.47 (59)	4.5 (18)	4.66 (14)	2.44 (347)	1.86 (56)	3.0 (93)	3.76 (19)
5. Early stage of child's growth is most crucial, therefore better nutrition is essential to attain a better health which is not possible due to increase in population.	3.17 (764)	4.83 (290)	2.57 (36)	3.75 (60)	3.24 (321)	3.0 (72)	3.0 (12)	3.2 (16)	3.25 (130)	3.64 (62)	4.0 (16)	5.0 (15)	2.68 (381)	1.73 (52)	2.87 (89)	4.3 (56)
6. Highly dense area has adverse effect on physical and mental health of the people residing in the area where can be avoided if the population is brought under control.	4.68 (1129)	4.2 (252)	4.92 (69)	4.93 (79)	5.0 (495)	3.5 (84)	3.75 (15)	5.0 (25)	4.6 (184)	3.7 (63)	5.0 (20)	5.0 (15)	4.54 (645)	4.4 (132)	4.93 (153)	5.0 (65)
7. The health services has a direct relation with population, less population, better medical facilities.	4.19 (1011)	4.65 (279)	4.71 (66)	4.62 (74)	5.0 (495)	4.29 (103)	5.0 (20)	5.0 (25)	4.55 (182)	3.82 (65)	5.0 (20)	5.0 (15)	4.9 (697)	4.33 (130)	5.0 (155)	5.0 (65)
8. Large families leads to social deformation because children get less attention of parents.	2.33 (563)	3.95 (237)	4.64 (65)	4.87 (78)	4.12 (408)	2.0 (53)	4.0 (13)	4.0 (20)	4.0 (160)	3.11 (53)	5.0 (20)	5.0 (15)	2.91 (414)	3.23 (97)	5.0 (155)	4.51 (60)

Table 49. Average and Mean Scores on attitude statements on problems of employment as a consequence of population growth, obtained by the extension functionaries of the Four Eastern States of India.

	BIHAR				MIZORAM				TRIPURA				WEST BENGAL			
	VEA	BDO	IS	DEO	VEA	BDO	IS	DEO	VEA	BDO	IS	DEO	VEA	BDO	IS	DEO
N =	24	60	14	15	99	24	4	5	1	10	17	4	3	1	142	30
1. In an over population country, women should not be allowed to seek employment because it takes away the chance of men.	2.11 (509)	3.01 (181)	3.0 (42)	3.87 (62)	3.04 (301)	3.29 (75)	2.75 (111)	4.2 (21)	3.47 (159)	4.0 (15)	3.0 (9)	3.17 (451)	2.53 (76)	3.96 (123)	3.0 (79)	3.0 (5)
2. Although the increase in population the employment opportunities are not increasing.	4.39 (1203)	3.98 (239)	4.85 (69)	3.63 (50)	4.07 (403)	3.83 (92)	4.0 (16)	4.60 (23)	4.0 (160)	3.52 (60)	4.0 (12)	4.4 (626)	4.0 (120)	4.35 (142)	3.30 (47)	3.30 (4)
3. Rural industries should be promoted to reduce the unemployment.	5.69 (891)	4.63 (278)	4.28 (60)	2.53 (47)	3.05 (302)	3.33 (80)	4.0 (16)	4.0 (20)	3.9 (156)	3.94 (67)	3.33 (10)	3.8 (541)	3.93 (118)	4.33 (135)	4.23 (55)	4.23 (4)
4. If the population is not checked now, whatever efforts are made to reduce the unemployment will go in vein.	2.24 (541)	4.63 (278)	4.28 (60)	2.93 (47)	3.05 (302)	3.33 (80)	4.0 (16)	4.0 (20)	3.9 (156)	3.94 (67)	3.33 (10)	2.9 (413)	2.3 (69)	3.83 (113)	5.0 (65)	5.0 (4)
5. No individual should be employed before the age of 20, it will help in reducing the unemployment.	3.26 (786)	3.4 (204)	2.78 (39)	2.37 (39)	1.23 (122)	1.5 (36)	3.25 (15)	2.0 (10)	1.25 (50)	2.0 (34)	4.0 (8)	1.57 (224)	1.96 (59)	2.35 (73)	3.69 (48)	3.69 (4)

Table 50. Average and Mean scores on attitude items on adoption of small family norms obtained by extension functionaries of the Four Eastern States of India.

	Bihar				Meghalaya				Tripura				West Bengal			
	VEA	BD	IS	DA	VEA	BD	IS	DA	VEA	BD	IS	DA	VEA	BD	IS	DA
N =	241	60	14	16	99	24	4	5	40	17	4	3	142	30	31	1
1. Planned families maintain a good standard of living.	3.38 (815)	3.31 (199)	3.35 (40)	3.50 (56)	3.33 (385)	4.07 (97)	5.0 (20)	4.60 (23)	3.92 (157)	3.64 (62)	5.0 (20)	5.0 (15)	3.04 (433)	3.15 (95)	4.61 (143)	5.0 (65)
2. Family planning should be a personal affair and the extension agent should have nothing to do with this.	1.61 (389)	1.56 (94)	2.71 (38)	4.68 (75)	3.22 (313)	4.0 (96)	4.25 (17)	3.80 (19)	3.35 (154)	2.95 (50)	3.5 (14)	3.33 (10)	3.61 (514)	3.4 (102)	3.64 (113)	4.38 (57)
3. Adoption of family planning measure is a sin because children are gift of God.	3.06 (733)	3.23 (194)	4.21 (59)	3.93 (63)	3.30 (327)	2.91 (70)	3.0 (12)	2.60 (13)	3.67 (147)	3.05 (52)	3.0 (12)	4.0 (42)	3.58 (509)	3.23 (97)	3.09 (96)	4.0 (52)
4. Manpower is a necessity in an agricultural country like ours and hence no family planning is needed.	2.57 (521)	1.60 (96)	3.57 (50)	3.68 (59)	3.09 (306)	2.25 (54)	5.0 (20)	2.80 (14)	3.32 (133)	3.23 (55)	3.0 (12)	4.33 (13)	2.38 (339)	2.63 (79)	2.07 (89)	4.46 (58)
5. Leaders and change agents should be the first one to be convinced about family planning programme.	3.08 (743)	2.45 (147)	3.28 (46)	4.37 (70)	4.05 (401)	3.29 (79)	4.75 (19)	3.60 (18)	3.57 (143)	2.94 (50)	4.75 (19)	4.66 (14)	3.35 (476)	3.43 (103)	4.19 (130)	4.61 (60)
6. Birth control measures are harmful and hence should not be used by anyone.	4.09 (987)	3.38 (233)	4.28 (46)	3.81 (51)	3.04 (301)	3.16 (76)	5.0 (20)	4.40 (22)	3.55 (142)	2.94 (50)	5.0 (20)	5.0 (15)	3.62 (515)	2.76 (83)	4.0 (124)	4.84 (63)
7. The best method of family planning is to raise the age of marriage of boys and girls.	4.56 (1100)	4.28 (257)	3.57 (50)	5.0 (80)	3.0 (297)	2.70 (65)	3.25 (13)	4.0 (20)	2.37 (95)	2.76 (47)	5.0 (20)	5.0 (15)	3.59 (510)	4.30 (129)	4.9 (152)	4.53 (59)
8. Family planning is a necessity and more people should use it.	(953)	(300)	4.28 (50)	5.0 (80)	3.06 (303)	2.87 (69)	5.0 (20)	4.40 (22)	3.5 (140)	3.23 (55)	5.0 (20)	4.0 (12)	3.81 (542)	3.66 (110)	4.8 (149)	4.92 (64)
9. Mothers of fewer children can maintain their health and health of their family much better than those having more member of children.	2.65 (641)	3.30 (138)	3.07 (43)	4.31 (69)	3.19 (316)	3.04 (73)	3.75 (15)	5.0 (25)	3.80 (152)	3.35 (57)	3.25 (13)	5.0 (15)	3.40 (484)	2.30 (69)	4.32 (134)	4.0 (52)
10. Family planning is not worth the trouble.	5.0 (1205)	4.0 (240)	3.92 (55)	3.06 (49)	3.34 (391)	2.54 (61)	4.50 (18)	2.60 (13)	3.0 (120)	3.0 (51)	3.75 (15)	4.0 (12)	2.12 (302)	2.26 (68)	4.85 (150)	3.76 (49)
11. There should be no family planning because the number of children is the symbol of status, security and influence in the society.	4.90 (1181)	4.45 (267)	3.85 (54)	4.50 (72)	3.12 (309)	2.12 (51)	5.0 (20)	3.80 (19)	3.25 (130)	2.58 (44)	3.75 (15)	4.66 (14)	2.24 (319)	2.73 (82)	4.48 (139)	4.38 (57)
12. Use of birth control	1.40	3.0	2.78	3.06	3.0	2.0	3.75	3.40	2.0	2.11	4.50	3.66	2.85	1.5	3.0	4.0

Table 51. Average and Mean Scores on attitude statements on role of extension functionaries in imparting population education, obtained by the extension functionaries of the Four Eastern States of India.

	BIHAR				MEGHALAYA				TRIPURA				WEST BENGAL							
	VJA	HDO	IS	DEO	DA	VEA	HDO	IS	DEO	DA	VEA	HDO	IS	DEO	DA	VEA	HDO	IS	DEO	DA
N = 241	60	14	16	1	99	24	4	5	1	40	17	4	3	1	142	30	31	13	1	
1. A right aptitude towards population education is most essential for field work and to work with people.	5.0 (1205)	3.9 (234)	3.64 (51)	5.0 (80)	3.65 (363)	2.62 (65)	4.75 (19)	4.0 (20)	4.0	5 (160)	3.52 (60)	5.0 (20)	5.0 (15)	4	3.46 (492)	4.0 (120)	4.83 (150)	5.0 (65)	5	
2. The extension agent should have the ability to communicate new ideas like small family practices to farm families.	4.27 (1031)	4.33 (263)	4.21 (55)	4.81 (111)	3.89 (380)	3.58 (86)	4.5 (18)	4.2 (21)	4.0	5 (160)	3.64 (62)	4.25 (17)	4.33 (13)	4	4.03 (573)	3.13 (94)	3.87 (120)	5.0 (65)	5	
3. A person can easily convince a new idea like small family to anybody if he has positive attitude and enough knowledge.	3.43 (829)	3.35 (201)	2.71 (38)	3.18 (51)	3.22 (325)	3.15 (75)	5.0 (20)	4.4 (22)	4.0	5 (160)	3.17 (54)	3.75 (15)	4.0 (12)	4	3.24 (461)	2.3 (69)	4.61 (143)	4.76 (62)	4	
4. With the special knowledge of working with people and changing the attitudes towards improved practices, extension agents can also change attitude towards family size.	3.92 (945)	3.05 (183)	3.24 (45)	4.75 (76)	3.52 (349)	3.7 (89)	4.25 (17)	3.4 (17)	4.0	5 (160)	3.52 (60)	4.0 (16)	3.66 (11)	4	3.72 (529)	2.43 (73)	4.38 (136)	4.69 (61)	4	
5. A good extension agent should have a sound knowledge of problems of large families in rural areas to be able to suggest the solutions.	3.37 (813)	2.78 (167)	3.78 (53)	4.25 (68)	3.22 (319)	4.25 (102)	1.0 (16)	3.8 (19)	3.0	4 (165)	3.64 (62)	4.5 (16)	3.33 (10)	4	2.75 (391)	2.73 (82)	3.74 (116)	3.84 (50)	4	
6. As rural people have full faith in extension agents, he can motivate them to adopt the small family norm.	2.73	3.56	4.0	3.06	3.32	4.2	3.75	3.0	3.0	3.77	5.8	3.25	4.0	4	3.44	3.4	4.16	3.92	4	
7. Problems of farm families are their personal problems, extension worker cannot help them, as regards to deciding the family size.	1.25 (303)	5.0 (300)	4.35 (61)	3.56 (57)	4.0 (396)	4.29 (103)	3.0 (12)	4.2 (21)	4.0	3.67 (147)	3.47 (59)	3.0 (12)	4.66 (14)	3	3.52 (500)	2.86 (86)	3.32 (103)	4.14 (54)	4	
8. The present available facilities for an extension worker to carry out any program is not sufficient therefore added responsibility to educate	2.76 (667)	4.65 (279)	3.0 (42)	4.12 (66)	3.49 (346)	4.08 (98)	2.75 (11)	3.8 (19)	3.8	3.92 (153)	3.52 (60)	3.5 (14)	4.33 (13)	3	3.59 (511)	3.03 (91)	3.12 (97)	4.53 (59)	4	



Mean Scores obtained by Extension Functionaries of the  
Country of Bangladesh on Attitude Items on Population  
Education

Table 52 indicates that the block development officers of the country of Bangladesh did not have favourable attitude towards meaning and scope of population (3.24 to 3.97). They admitted that it is a gigantic task; it should be given top priority as it would help in forming positive attitude towards the adoption of small family norm. All categories of extension workers, except that of VEAs, appeared to be thinking population education as another name for sex education. But still, except for the BDOs, all thought it was a programme to create awareness about population problems.

The VEAs, BDOs and IS apparently did not agree that population education should be given top priority. They were rather uncertain about it. It were only directors of agriculture who felt uncertain about the enormous nature of the task and the duration which would be needed to achieve the results.

It was only in the case of DEOs who were rather undecided about the role of population education in attitude formation regarding family norm.

Attitude towards social factors causing population increase varied from item to item (Table 53). On the role of customs and traditions in deciding the size of the

family, only district extension officers appeared to have positive attitudes as they scored highest; all the rest were uncertain on this aspect. It were only IS who scored highest on the item mentioning early marriages being harmful to the country's progress. All the rest scored an average mean score of 3.19 to 3.88 indicating their uncertainty. For the desirability of number of children and their sex, it were the DEOs who scored lowest. The rest of the extension functionaries also did not score high. It were only the instructional staff who indicated positive answer.

On item like a woman with many children alive is respected, it were only the VEAs and BDOs who gave positive answers. The instructional staff scored lowest scores. It were only the VEAs and DAs who indicated positive answers on the number of children and importance of education.

Almost all extension functionaries, except the IS, understood and indicated positive attitude towards the prevailing social feeling that more children is security for old age! Whereas it were only VEAs, DEOs and DAs who indicated positive attitude towards every child is born with his own fate'.

There was variation from item to item and the mean scores differed from functionary to functionary. The

variations could be attributed to their interaction with people and length of working in real life situation.

While developing the curriculum and imparting the training these variation should be taken into consideration and the curriculum accordingly modified.

Economic factors and population growth (Table 54) indicated more uncertainty of attitude possessed by the extension functionaries of Bangladesh except for the item like 'children bring satisfaction at present and money in future' where a positive trend was indicated by all functionaries irrespective of the status. Whereas on item like 'big family means more earning hands thus more prosperity', the DEOs and DAs appeared to be undecided. The rest indicated positive attitude for 'large families providing more help in farming thus resulting in better economic status'. Only IS indicated positive answers for items like 'large families with a small income becomes a burden'. It were the DEOs followed by DAs who scored lowest. The question 'large families have more earning members leading to better economic status' was responded unfavourably. The BDOs scored lowest. All the rest were undecided. This indicates that except for the IS followed by DEOs and BDOs the attitude of the rest of the respondent was not clear. The respondents were not certain of the economic factors which cause the population growth.

For the religious and psychological factors which cause

population growth it were mainly the directors of agriculture who scored high mean scores on nearly all items (Table 55). It was only on the item 'many children to a women is God's blessing' that scored low. On the item like 'marriages are solemnized only to produce progeny' it were the VEAs who scored lowest mean scores.

On the prevailing feeling like 'use of contraceptive will lead to mental tension in a man, if the couple' refrains from sexual relationship for long, it will have ill effects on health' were responded negatively. On both the statements it were the BDOs who scored lowest.

On physiological and physical factors (Table 56) it was only on the statement like 'a girl married at an early age will have more children', a positive attitude was indicated by all extension functionaries irrespective of their states. Whereas on other two statements the responses were negative. It were the directors of agriculture who scored lowest mean scores. On the statement which said that 'girls and boys should be explained the process of conception' almost all either indicated negative or uncertain response. This clearly indicates the reservation possessed by individuals regarding talking to younger generation any thing about sex.

The consequences of population growth on certain aspects and resources were included in the study. When the respondents were asked to indicate their attitude toward problem of land

and food in relation to population growth, it was found that in general the attitude was negative (Table 57) except for the DEOs and DAs on item 'increase in population will increase the land utilization for road, building, schools, etc.' who scored better. On the question of 'limitation of land to produce food beyond a certain limit' almost all responded uncertainly except the IS, who gave a negative reply. On the statement like 'food production should correspond with population growth, almost all agreed except for the DA who responded otherwise. On the items like role of farm technology in solving the food problem, 'import of food grains to meet food shortages and 'large families leaving nothing for investment to improve production' the trend was negative as was indicated by all extension functionaries.

Table 58 indicates that in general all the functionaries obtained almost equal mean scores but overall it were the DEOs who obtained lesser scores.

All extension functionaries strongly agreed upon the effect of improper food on health. But it were only VEAs who indicated positively that due to increase in population there was increase in malnutrition and undernutrition among certain groups. It were the DEOs who scored the lowest on this item. Effect of frequent pregnancies on health of women were positively indicated only by IS and DAs. Whereas importance of proper diet during pregnancy and lactation,

and in child's growth was indicated positively only by IS.

On the role of better nutrition in child's early stages the higher mean scores were obtained by VEAs followed by BDOs and IS. Effect of living in highly dense areas on health were indicated by BDOs, DEOs and DAs in positive manner, whereas the VEAs and IS were undecided. The non-availability of proper health services in relation to population growth and large families lead credence to unhealthy environment. This was positively indicated by all, irrespective of their professional status.

The attitudes on effect of population growth on employment (Table 59) was responded negatively on all items by the VEAs. They scored lowest mean scores on all items except on (i) where DA obtained the lowest scores. For items like 'if population is not checked now whatever efforts are made will go in vein' and 'no individual should be employed before the age of 20', negative attitudes were indicated by all respondents. The need to promote rural industries to reduce unemployment was responded positively by all except the VEAs.

Table 60 indicates that VEAs possessed negative attitude towards small family norm as they obtained the lowest mean scores on almost all items. The VEAs were followed by DEO, BDO, and IS. The items on which all scored relatively low mean scores were mainly related to adoption of family planning

measures by farm families and role of extension functionaries.

The attitude, of village extension agents towards 'role of extension functionaries in imparting population education', was not very encouraging (Table 61). on specific items like faith of rural people in extension agents, and whether 'extension agents can motivate them to adopt small family norm', the responses by DEOs were the lowest, and the rest indicated indeciveness. All levels of extension functionaries except the director of agriculture felt that extension workers will loose their credibility if they even talked about population education.

Regarding availability of facilities at present and the view that population education should not be included in the job responsibilities, all extension functionaries indicated positive attitude except for the director of agriculture. The same was the case when geographical area to be covered by the field worker was considered.

Regarding the 'importance of having positive attitude and sound knowledge regarding any innovation helps in convincing' were indicated positively only by the VEA and DAs but the rest were found to be uncertain about it.

Integration of population education in extension work was indicated negatively only by VEAs as they scored lowest mean scores. It were the BDOs and IS who scored lowest mean scores on item which indicated that the objective of

population education and extension work was identical, that is, improving the quality of life of rural families. Similarly it were the BDOs who scored lowest score on relationship between knowledge and attitude.



Table 52. Average and Mean Scores obtained by Extension Functionaries of Bangladesh on Meaning and Scope of Population Education.

Meaning and Scope	VEA	BDO	IS	DEO	DA
1. Population education is another name of sex education.	4.29 1672	3.97 788	3.69 233	2.83 51	2.33 7
2. Population education is a process to bring awareness about population problems.	4.68 1824	3.32 659	4.03 254	4.00 72	4.00 12
3. Population education programme should be given top priority among other programmes.	3.65 1423	4.70 932	4.90 309	5.00 90	4.00 12
4. Population education programme is a giagan-tic task and cannot be achieved in short period.	4.22 1645	4.38 868	4.28 270	4.60 83	3.33 10
5. Population education is a welfare programme.	4.92 1915	3.24 643	3.23 204	5.00 90	5.00 15
6. It helps in forming positive attitudes towards adoption of small family norm.	4.00 1556	4.25 842	5.0 315	3.11 56	5.00 15

Table 53. Average and Mean Scores obtained by Extension Functionaries of Bangladesh on Social Factors Contributing to Population Increase.

Social Factors	VEA	BDO	IS	DEO	DA
1. Society's customs and influences on individual's decisions regarding family size	3.37 1311	3.77 748	3.77 238	4.38 79	3.33 10
2. Society advocates early marriages though not good for country's development.	3.34 1300	3.19 632	5.00 315	3.88 70	3.33 10
3. One should have preferably two sons and one daughter.	3.34 1300	2.77 549	4.60 291	2.58 43	2.66 8
4. A woman with many children alive is respected more.	4.42 1720	4.81 954	2.32 146	3.38 61	3.66 11
5. A family with two or three educated and healthy children is better than many uneducated or less educated children.	4.43 1724	3.41 676	3.12 197	3.77 68	5.00 15
6. More children is security for old age.	4.40 1712	5.0 1000	3.23 204	5.00 90	5.00 15
7. Every child takes birth with his or her own fate, thus it does not matter whether you have two or more.	4.48 1743	3.19 632	1.40 279	4.22 76	5.00 15

Table 54. Average and Mean Scores Obtained by Extension Functionaries of Bangladesh on Attitudes Items of Economic Factors contributing to Population Education.

Economic Factors	VEA	BDO	IS	DEO	DA
1. Big family means more earning hands and more prosperity.	1594 4.09	942 4.75	315 5.00	66 3.66	11 3.66
2. Larger families provide better help for farming, thus more production and better economic status.	1203 3.09	679 3.42	315 5.00	72 4.00	9 3.00
3. Children bring satisfaction at present and money in future.	1649 4.23	813 4.10	315 5.00	90 5.00	9 3.00
4. Large family with small income becomes a burden.	1489 3.82	603 3.04	310 4.92	35 1.94	7 2.33
5. Large families will have many earning members in the family thus better economic status.	1509 3.87	362 1.82	218 3.46	69 3.83	9 3.00

Table 55. Average and Mean Scores Obtained by Extension Functionaries of Bangladesh on Attitude Items on Religious and Psychological Factors contributing to Population Education.

Religious and Psychological Factors	VEA	BDO	IS	DEO	DA
1. Trying to restrict the number of children is interfering the nature.	1268 3.25	905 4.57	211 3.34	47 2.61	13 4.33
2. A woman who concieves immediately after an unsuccessful pregnancy will produce a son.	1339 3.44	676 3.41	129 2.04	45 2.50	14 4.66
3. Marriages are made only to produce progeny.	1054 2.70	833 4.20	315 5.00	79 4.38	15 5.00
4. Many children to a woman is God's blessing.	1945 5.00	889 4.43	315 5.00	80 4.44	15 5.00
5. Using artificial means to prevent or terminate pregnancy is insulting God.	918 2.35	783 3.95	224 3.55	73 4.05	13 4.33
6. Use of contraceptive will lead to mental tension in a man.	1280 3.29	321 1.62	89 1.41	69 3.83	12 4.00
7. A couple if refrain from sexual relations for long will have ill effects on health.	1012 2.60	366 1.84	199 3.15	51 2.88	10 3.33

Table 56. Average and Mean Scores Obtained by Extension Functionaries of Bangladesh on Attitude Items on Physiological and Physical Factors contributing to Population Increase.

Physiological and Physical Factors	VEA	BDO	IS	DEO	DA
1. Rich fried food increases the urge for sex relations which results in more children.	1044 2.68	702 3.54	225 3.57	50 2.77	3 1.00
2. A girl married at an early age will have more children.	1648 4.23	936 4.72	279 4.42	86 4.77	15 5.00
3. Girls and boys should be explained the process of conception.	1521 3.91	469 2.36	173 2.74	68 3.77	6 2.00

Table 57. Average and Mean Scores Obtained by Extension Functionaries of Bangladesh on Attitude Towards Problems of Land and Food due to Increase in Population.

Land and Food	VEA	BDO	IS	DEO	DA
1. With increase in population there is increase in land utilisation for roads, houses, schools and hospitals, etc.	1329 3.41	417 2.10	163 2.58	73 4.00	13 4.33
2. Each resource has its limitations so is with land, we cannot go on adding pressure to produce more food.	1247 3.20	730 3.68	200 1.01	69 3.83	7 2.33
3. Food production should keep pace with population growth.	1663 4.27	821 4.14	315 5.00	88 4.88	7 2.33
4. Modern farm technology will solve all the problems of food shortage.	1021 2.62	705 3.56	186 2.95	45 2.50	10 3.33
5. Food grains could always be imported from the countries where there is food surplus.	1229 3.15	664 3.35	208 3.30	40 2.22	8 2.66
6. Large families leave literally nothing for investment on the farm to improve the production.	1311 3.37	647 3.26	208 3.30	40 2.22	8 2.66

Table 58. Average and Mean Scores Obtained by Extension Functionaries of Bangladesh on Attitude Items on Hazards on Family and Health due to Increase in Population.

Family and Health	VEA	BDO	IS	DEO	DA
1. Due to increase in population the quantity and quality of food consumed does not give enough energy which affects health.	1949 5.00	990 5.00	315 5.00	90 5.00	15 5.00
2. Due to increase in population the increase of malnutrition and undernutrition is wide among children, pregnant and lactating mothers as the availability of food is less.	1959 4.03	639 3.22	214 3.39	53 2.94	11 3.66
3. The shorter the interval between two pregnancies higher are the percentage of malnourished mother and children.	1486 3.82	457 2.30	307 4.87	69 3.83	12 4.00
4. Sixty to 70 percent of brain and other development takes place in early stage, thus proper diet for pregnant and lactating mothers is essential which is not available due to population increase.	1367 3.51	498 2.51	252 4.00	61 3.38	9 3.00

-----

Table 58 (contd..)

Family and Health	VEA	BDO	IS	DEO	DA
5. Early stage of child's growth is most crucial, therefore better nutrition is essential to attain a better health which not possible due to increase in population.	1966 5.05	879 4.43	253 4.01	54 3.00	8 2.66
6. Highly dense area has adverse effect on physical and mental health of the people residing in the area which can be avoided if the population is brought under control.	1384 3.50	946 4.77	231 3.66	88 4.88	13 4.33
7. The health services has a direct relation with population, less population, better medical facilities.	1958 5.03	946 4.77	267 4.23	90 5.00	13 4.33
8. Large families leads to social deformation because children get less attention of parents.	1607 4.13	913 4.61	298 4.73	86 4.77	14 4.66



Table 59. Average and Mean Scores Obtained by Extension Functionaries of Bangladesh on Attitude Items on Implications on Employment of Increasing Population.

Employment	VEA	BDO	IS	DEO	DA
1. In an over populated women should not be allowed to seek employment because it takes away the chance of man.	1501 3.85	666 3.36	312 4.95	63 3.50	10 3.33
2. Alongwith the increase in population the employment opportunities are not increasing.	821 2.11	929 4.69	222 3.52	80 4.44	15 5.00
3. Rural industries should be promoted to reduce the unemployment.	613 1.57	900 4.54	273 4.33	75 4.16	13 4.33
4. If the population is not checked now, whatever efforts are made to reduce the unemployment will go in vein.	703 1.80	583 2.94	189 3.00	59 3.27	7 2.22
5. No individual should be employed before the age of 20, it will help in reducing the unemployment.	409 1.05	254 1.28	114 1.80	40 2.22	5 1.66

Table 60. Average and Mean Scores Obtained by Extension Functionaries of Bangladesh on Attitude Items on Ways to Educate People towards adoption of small Family Norm.

Small Family Norm	VEA	BDO	IS	DEO	DA
1. Planned families maintain a good standard of living.	1102 2.83	957 4.83	302 4.79	90 5.00	15 5.00
2. Family planning should be a personal affair and the extension agent should have nothing to do with this.	1343 3.45	594 3.00	241 3.82	53 2.94	9 3.00
3. Adoption of family planning measure is a sin because children are gift of God.	602 1.54	832 4.20	253 4.01	66 3.66	14 4.66
4. Manpower is a necessity in an agricultural country like ours and hence no family planning is needed.	989 2.54	669 3.37	176 2.79	58 3.22	10 3.33
5. Leaders and change agents should be the first one to be convinced about family planning programme.	737 1.89	981 4.95	307 4.87	67 3.72	15 5.00
6. Birth control measures are harmful and hence should not be used by anyone.	1259 3.23	636 3.21	215 3.41	59 3.27	6 2.00
7. The best method of family planning is to raise the age of marriage of boys and girls.	1028 2.64	990 5.00	313 4.96	90 5.00	14 4.66

Table 60 (contd..)

Small Family Norm	VEA	BDO	IS	DEO	DA
8. Family planning is a necessity and more people should use it.	1428 3.67	901 4.55	315 5.00	83 4.61	13 4.33
9. Mothers of fewer children can maintain her health and health of the family much better than those having more number of children.	1213 3.11	726 3.66	195 3.09	62 3.44	15 5.00
10. Family planning is not worth the trouble.	734 1.88	396 2.00	218 3.46	61 3.38	12 4.00
11. There should be no family planning because the number of children is the symbol of status, security and influence in the society.	642 1.65	753 3.80	301 4.77	58 3.22	12 4.00
12. Use of birth control measures may produce abnormal babies.	937 2.40	386 1.94	163 2.58	50 2.77	10 3.33
13. Much more education regarding methods and devices of family planning is needed to make the family planning programme a success.	493 1.26	698 3.52	142 2.25	90 5.00	15 5.00

Table 61. Average and Mean Scores Obtained by Extension Functionaries of Bangladesh on Attitude Items on Role of Extension Functionaries in Imparting Population Education.

Role of Extension Functionaries	VEA	BDO	IS	DEO	DA
1. A right attitude towards population education is most essential for field work and to work with people.	1386 3.56	911 4.60	293 4.65	86 4.77	15 5.00
2. The extension agent should have the ability to communicate new ideas like small family practices to farm families.	1293 3.32	652 3.29	249 3.95	73 4.05	14 4.66
3. A person can easily convince a new idea like small family to anybody if he has positive attitude and enough knowledge.	1949 5.00	759 3.83	197 3.12	61 3.38	13 4.33
4. With the special knowledge of working with people and changing the attitudes towards improved practices, extension agents can also change attitude towards family size.	1036 2.66	801 4.04	214 3.39	59 3.27	7 2.33
5. A good extension agent should have a sound knowledge of problems of large families in rural areas to be able to suggest the solution.	1414 3.63	838 4.23	267 4.23	80 4.44	8 2.66

Table 61 (contd..)

Role of Extension Functionaries	VEA	BDO	IS	DEO	DA
6. As rural people have full faith in extension agent, he can motivate them to adopt the small family norm.	1335 3.43	594 3.00	202 3.20	45 2.50	10 3.33
7. Problems of farm families are their personal problems, extension worker cannot help them, as regards to deciding the family size.	1954 5.02	719 3.63	315 5.00	60 3.33	12 4.00
8. The present available facilities for an extension worker to carry out any program is not sufficient, therefore, added responsibility to educate people regarding population education is not possible.	1980 5.00	990 5.00	298 4.73	89 4.94	9 3.00
9. The geographical area allotted to each extension worker is beyond the capacity of an individual to reach, so even if the worker wants, he cannot reach to all the people with the message of population education.	1687 4.33	990 5.00	283 4.49	90 5.00	10 3.33
10. Extension work and population education should be integrated together.	2998 2.56	8593 4.33	2893 4.58	7622 4.22	1377 4.33
11. Extension workers will lose their credibility if they start talking about population education.	1012 2.60	398 1.96	143 2.26	39 2.11	12 4.00
-----					

Table 61 (contd..)

Role of Extension Functionaries	VEA	BDO	IS	DEO	DA
12. Extension workers, as they have already established rapport with villagers can motivate them better to adopt small family norm.	1936 4.97	679 3.42	309 4.90	58 3.22	10 3.33
13. The success of population education program depends a great deal upon the help of extension worker	503 3.86	908 4.58	279 4.42	90 5.00	12 4.00
14. For imparting population education to rural people extension workers should be well trained.	1728 4.42	990 5.00	307 4.87	81 4.50	11 3.66
15. Population growth is causing serious problems, thus I feel it is my duty to tell people to limit the family size.	1846 4.74	691 3.48	205 3.25	76 4.22	13 4.33
16. Objective of our extension work is improving the quality of life of rural families thus, population education is automatically included.	1389 3.57	542 2.73	186 2.95	90 5.00	14 4.66
17. Knowledge and attitude regarding population education has direct relation with what we think and talk to people for limiting the family.	1915 4.92	536 2.70	196 3.11	85 4.72	15 5.00

4.3.1 Distribution of Extension Functionaries from the Four Eastern States of India and the Country of Bangladesh according to the Degree of Favourableness of their Attitudes towards Population Education.

The attitudes were measured on a Likert type scale on five point continuum. The five points ranged from strongly agree to strongly disagree. The minimum scores were 83 and the maximum 415.

To discern the degree of favourableness of attitudes, four levels of degree of attitudes were deciphered after calculating the median. The four levels were unfavourable, less favourable, favourable and highly favourable. Each of the extension functionaries were categorised according to the scores they obtained.

Table 62 reveals that majority of the VEA's had less favourable attitude. A very small percentage of the VEA's demonstrated unfavourable attitudes. But the trend was towards the positive side. The same was the case for BDO and IS. In the case of IS, a small percentage (4.30%) did have highly favourable attitude. For DEO's and DA's it was indicated that majority had favourable attitude.

The point that majority had favourable attitude is quite encouraging. The less favourable attitudes could be changed to favourable and from favourable to highly favourable with proper education, information and training. This indicates

their readiness to accept and ingrain population education task in their regular duties.

Bihar faces the problems of over population, poverty, unemployment, draught etc. The readiness of extension functionaries with relatively positive attitudes indicates the gravity of situation that people are conscious and ready to do the task which is normally not appreciated.

Table 63 indicates that in Tripura and Meghalaya majority of the VEAs and BDOs had less favourable attitudes followed by favourable attitudes. The remaining of the extension functionaries had favourable attitudes. A good majority of ISs who are the trainers indicated having a highly favourable attitudes. The fact that the problem of population is not so acute in these two states is indicative of their readiness for future.

However, it was the majority of VEAs and BDOs who had less favourable attitudes towards population education. This was because of the fact that communication was difficult in some of the remote areas of the two states, thus providing less opportunities to the functionaries to interact, to acquire more information to understand it better. But the point that they did not have unfavourable attitude is satisfactory. The less favourable can be converted to more favourable with proper training.



The majority of extension functionaries from West Bengal fell into the categories of less favourable to favourable as indicated in Table 64. The DA indicates having highly favourable attitude which might influence upon his subordinates. Majority of IS and DEOs also had positive attitudes. It were the VEAs and BDOs who draw attention and cause concern as they indicated less favourable attitude which implies that they need more training to enhance their knowledge so that they are able to mould their attitudes towards more favourable.

Table 65 reveals that the directors of agriculture of Bangladesh were of the extreme, majority having less favourable attitude but the rest (33.33%) had highly favourable attitude. The distribution amongst instructional staff and DEO was between the categories of less favourable and favourable attitudes, but a good majority of both the categories had favourable attitude.

The percentage of extension functionaries with unfavourable attitude was low. It appears that the BDO, IS and DEO had more positive attitude. The favourableness of attitudes could be attributed to the vast dissemination of concept of population education through mass communication media as it was observed by the investigator during the visit for data collection. They were also imparted training on population education through training centres. The news papers quite

often publish articles on aspects of population education.  
Radio and television also do their share.

Table 62. Distribution of Respondents from State of Bihar (India) According to their Degree of Favourableness of Attitudes towards Population Education.

Levels of Extension Functionaries	Unfavourable		Less Favourable		Favourable		Highly Favourable	
	F	%	F	%	F	%	F	%
Village extension agents (n = 241)	26	10.79	115	47.72	96	39.83	4	1.66
Block development officer (n = 60)	3	5.00	35	58.33	22	36.67	-	-
Instructional staff (n = 14)	-	-	8	57.40	4	28.57	2	14.30
District extension officer (n = 16)	-	-	1	61.50	13	81.25	2	12.50
Director of agriculture (n = 1)	-	-	-	-	1	100.00	-	-

Table 63. Distribution of Respondents from States of Meghalaya and Tripura (India) According to their Degree of Favourableness of Attitudes towards Population Education.

Levels of Extension Functionaries	Unfavourable		Less Favourable		Favourable		Highly Favourable	
	F	%	F	%	F	%	F	%
Village extension agent (n = 139)	2	1.44	81	58.27	56	40.29	-	-
Block development officer (n = 41)	4	9.76	30	73.17	5	12.19	2	4.88
Instructional staff (n = 8)	-	-	-	-	5	62.50	3	37.50
District extension officer (n = 8)	-	-	1	12.50	7	87.50	-	-
Director of Agriculture (n = 2)	-	-	-	-	2	100.00	-	-

Table 64. Distribution of Respondents from State of West Bengal (India) According to their Degree of Favourableness of Attitudes towards Population Education.

Level of Extension Functionaries	Unfavou- rable		Less Favo- urable		Favou- rable		Highly Favourable	
	F	%	F	%	F	%	F	%
Village extension agent (n = 142)	20	14.10	83	58.45	39	27.46	-	-
Block development officer (n = 30)	10	33.33	19	63.34	1	3.33	-	-
Instructional staff (n = 31)	-	-	1	3.23	28	90.32	2	6.45
District extension officer (n = 13)	-	-	2	15.38	7	53.85	4	30.76
Director of agri- culture (n = 1)	-	-	-	-	-	-	1	100.00

Table 65. Distribution of Respondents from the Country of Bangladesh According to their Degree of Favourableness of attitudes towards Population Education.

Levels of Extension Functionaries	Unfavou- rable		Less Favo- urable		Favou- rable		Highly Favourable	
	F	%	F	%	F	%	F	%
Village extension agent (n = 389)	8	2.05	231	59.38	150	38.56	4	1.66
Block development officer (n = 198)	11	5.55	55	27.17	127	64.14	5	2.53
Instructional staff (n = 63)	1	1.59	17	26.99	45	71.43	-	-
District extension officer	-	-	6	33.33	12	66.67	-	-
Director of agri- culture (n = 3)	-	-	2	66.67	-	-	1	33.33

4.3.2 Relationship between the Degree of Favourableness of Attitudes of Extension Functionaries from the Four Eastern States of India and the Country of Bangladesh and Selected Personal and Professional Characteristics.

Chi-square test of association between the degree of favourable attitude and the personal and professional characteristics of the extension functionaries of Bihar revealed that in the case of VEAs all the characteristics were significantly related.

It was found that young VEAs had more favourable attitude, may be because of their enthusiasm they felt more inclined to impart population education whereas the older ones had tired themselves out. Religion was found to be negatively associated. All those who had large families and lived in joint families had more favourable attitude, possibly their experience made them more desirous of favouring a small family. Education was positively associated. Higher the education more favourable were the attitudes, because education helps to think more logically and rationally. Those who had pre-service training had more favourable attitude, may be because before they went to the field a systematic structured knowledge of the situation made them feel more conscious and confident. Higher income was also found to be associated with favourable attitude (Table 66).

As for the block development officers of Bihar, all characteristics, except for the professional training, were signif-

icantly associated. Age was negatively associated. Those who had small families and lived in nuclear families had favourable attitude. The relief from the constant worries about the family and their needs could be one attribute which favoured small family contributing to the favourable attitude towards population education. Educationwise they all had the same type and level of education but the variation in the degree of attitude could be due to other reasons like their role, their duties or may be their own experience. Here also higher income was found to be associated with favourable attitude. Whereas religion was negatively associated. (Table 67)

Table 66. Chi-Square values for Test of Association between the Attitudes of Village Extension Agents from Bihar towards Population Education and certain Personal and Professional Characteristics.

Characteristics	Chi-Square	df.	Level of Significance
Age	126.55	9	.01
Religion	43.42	3	.01
Size of the family	109.14	12	.01
Type of the family	122.86	6	.01
Education	75.43	6	.01
Professional training	71.11	6	.01
Income	48.54	18	.01

Table 67. Chi-Square Values for Test of Association between the Attitudes of Block Development Officers from State of Bihar towards Population Education and certain Personal and Professional Characteristics (N = 60).

Characteristics	Chi-Square	df.	Level of Significance
Age	24.87	9	.01
Religion	24.77	3	.01
Size of the family	21.62	6	.01
Type of the family	33.55	4	.01
Education	102.93	6	.01
Professional training	4.00	6	NS
Income	39.15	2	.01

Table 68. Chi-Square Values for Test of Association between the Attitudes of Instructional Staff from State of Bihar towards Population Education and certain Personal and Professional Characteristics (N = 14)

Characteristics	$\chi^2$	df.	Level of Significance
Age	8.42	2	.05
Religion	3.98	2	NS
Type of the family	1.56	2	NS
Size of the family	3.98	2	NS
Education	3.98	2	NS
Professional training	3.98	2	NS
Income	8.42	2	.05

Table 69. Chi-Square Values for Test of Association between the Attitudes of District Extension Officers from the State of Bihar towards Population Education and selected Personal and Professional Characteristics (N = 16).

Characteristics	Chi-Square	df.	Level of Significance
Age	17.49	4	.01
Religion	4.99	4	NS
Type of the family	16.63	2	.01
Size of the family	16.63	2	.01
Education	16.63	2	.01
Professional training	16.63	2	.01
Income	14.08	2	.01

The Chi-square test between the degree of favourable attitudes and the personal and professional characteristics of VEA's of Meghalaya and Tripura were significant except for the professional training. Age was found to be significantly associated. When the statistical calculations were computed it was found that attitude were found to be favourable upto a certain age, but beyond that age it ceased to be favourable. May be beyond a particularly age, individuals are less prone to change their opinions and attitudes. In religion it was revealed that the Hindus had more favourable attitudes, followed by Christians. Those having large and joint families had negative attitudes whereas respondents with small and



nuclear families had more favourable attitude. For those with negative attitude, it could be attributed to the joint family system. Maybe the respondents themselves had a small family (fewer children) but due to the joint family system they had to undergo the experience of having a big family and because they could not free themselves from the socially accepted family system, they had those negative attitude. People with higher education and higher income certainly had favourable attitude and people with in-service training had favourable attitude. As education helps individual to think logically and critically it helps formation of positive attitude. Income makes them care-free and concentrate better towards knowing about population education. People with pre-service training mainly concentrate their energies on passing in the training course because that gives them the security of job. This could be the reason which inhibits them to express their attitudes freely.

Table 70. Chi-Square Values for Test of Association between Attitudes of Village Extension Agents from States of Meghalaya and Tripura towards Population Education and Selected Personal and Professional Characteristics (N = 139).

Characteristics	Chi-Square	df.	Level of Significance
Age	42.94	4	.01
Religion	30.20	4	.01
Size of the family	40.32	8	.01
Type of the family	22.44	4	.01
Education	71.08	4	.01
Professional training	3.28	2	NS
Income	40.87	2	.01

Table 71. Chi-Square Values for Test of Association between Attitudes of Block Development Officer from States of Meghalaya and Tripura towards Population Education and selected Personal and Professional Characteristics (N = 41).

Characteristics	Chi-Square	df	Level of Significance
Age	30.30	9	.01
Religion	38.85	6	.01
Size of the family	22.82	12	.05
Type of the family	13.94	6	.05
Education	51.18	3	.01
Professional training	8.93	3	.05
Income	5.98	3	NS

In the case of block development officers where only income was not found to be significantly related. With advancing age, the degree of favourableness increased, but beyond a certain age it ceased to increase. Small family, nuclear in nature, was positively associated. With the increase in income there was more favourable attitude and people with inservice training had favourable attitude. Though all the BDO's had the same level and type of education, there was difference in the attitude. For religion it was indicated that followers of Hindu religion had favourable attitude.

As age increases, the horizons of understanding widens.

Table 72. Chi-Square Values for Test of Association between Attitudes of Instructional Staff from State<sup>s</sup> of Meghalaya and Tripura towards Population Education and selected Personal and Professional Characteristics (N = 8).

Characteristics	Chi-Square	df.	Level of Significance
Age	0.84	1	NS
Religion	1.30	1	NS
Size of the family	0.50	1	NS
Type of the family	0.14	1	NS
Education	0.50	1	NS
Professional training	0.50	1	NS
Income	0.50	1	NS

Table 73. Chi-Square Values for Test of Association between Attitudes of District Extension Officers from States of Meghalaya and Tripura towards Population Education and selected Personal and Professional Characteristics (N = 8).

Characteristics	Chi-Square	df.	Level of Significance
Age	0.30	1	NS
Religion	2.67	1	NS
Size of the family	4.50	1	0.50
Type of the family	4.50	1	0.50
Education	4.50	1	0.05
Professional training	4.50	1	0.05
Income	4.50	1	0.05

Perhaps due to education, interaction or experience, the understanding increases towards any object or subject. Under such circumstances there are chances that one might inculcate positive attitude. This might be so in the case of BDOs. The same level and type of education, may not in all individuals, contribute towards positive attitudes even though the objective was to do so. The variation always exists due to individual difference, which might have happened in the case of BDOs of Meghalaya and Tripura, hence the difference.

None of the characteristics was significantly related with the attitudes of instructional staff. May be because they all understood and realized the importance of task, thus they imparted education sincerely, even if it added to their work. Conscientious as the teachers are, they themselves take the task of population education very devotedly.

For district extension officers, age and religion were not found to be significant, but all the rest of the characteristics were related significantly. It was found that DEOs who had small families and nuclear families had more positive attitude.

Higher education and higher income were associated positively and training had its impact on attitude. The advantages of small size of the family and nuclear families, are bound to favour. May be this was true in the case of DEOs of Meghalaya and Tripura.

Training develops thinking, skill and foresight, thus it may be that the DEO's understood the consequences of population explosion and as a result developed positive attitudes.

For the village extension agents of West Bengal, all characteristics were found to be significantly related. It was found that VEA's with higher education and higher income had more favourable attitudes. May be the VEA's with higher education felt more concerned about the population problems and transmitted their concern to the rural masses. VEA's with in-service training had favourable attitudes. This could be due to the fact that people who came for the in-service training had some years of field experience and were aware of rural situation better than those who joined the training programme first. In-service training definitely contributed towards the formation of positive attitudes.

Age was found to be negatively associated. Size of the family had its impact, the smaller the size of the family the more favourable were the attitudes. Those who had joint family displayed more favourable attitude.

Income and age were not significant in the case of BDO's of West Bengal. Respondents with small size and nuclear type of family possessed more favourable attitude. In spite of the same level of education or training, there were differences in the degrees of favourable attitudes possessed by the BDO. Small size and nuclear type of family contributed towards

Table , 74. Chi-Square Values for Test of Association between Attitudes of Village Extension Agents from the State of West Bengal towards Population Education and selected Personal and Professional Variables (N = 142).

Characteristics	Chi-Square	df.	Level of Significance
Age	45.51	6	.01
Religion	23.46	4	.01
Size of the family	140.42	8	.01
Type of the family	34.51	4	.01
Education	10.47	4	.05
Professional training	6.93	2	.05
Income	29.34	4	.01

Table 75. Chi-Square Values for Test of Association between Attitudes of Block Development Officers from West Bengal towards Population Education and selected Personal and Professional Characteristics (N = 30).

Characteristics	Chi-Square	df.	Level of Significance
Age	7.16	6	NS
Religion	16.20	2	.01
Size of the family	3.46	4	NS
Type of the family	17.56	2	..01
Education	16.20	2	.01
Professional training	16.20	2	.01
Income	8.22	2	NS

Table 76. Chi-Square Values for Test of Association between Attitudes of Instructional Staff from West Bengal towards Population Education and selected Personal and Professional Characteristics (N = 31).

Characteristics	Chi-Square	df.	Level of Significance
Age	10.64	4	.05
Religion	15.15	4	..01
Size of the family	4.66	4	NS
Type of the family	45.35	2	.01
Education	45.33	2	.01
Professional training	45.33	2	.01
Income	45.35	2	.01

Table 77. Chi-Square Values for Test of Association between Attitudes of District Extension Officer from State of West Bengal towards Population Education and selected Personal and Professional Characteristics (N = 13).

Characteristics	Chi-Square	df.	Level of Significance
Age	12.14	6	.05
Religion	2.95	2	NS
Size of the family	2.03	2	NS
Type of the family	2.95	2	NS
Education	3.04	2	NS
Professional training	2.95	2	NS
Income	1.77	2	NS

positive attitudes. This may be due to the advantages of a small family which they personally experienced and as a result were encouraged to advocate small families. The system of joint family could be considered as a factor responsible for large families, which appears to be true in many cases. As it was found that those who had large families were joint in nature. It was also found that those who had joint families had some what negative attitudes towards population education.

The responsible post the district extension officers held could possibly be the major attribute for the favourableness of attitudes alongwith other personal and professional characteristics contributing towards favourableness. If the policy makers and decision makers have favourable attitude they might provide incentives and other facilities to the implementors. A good background and information in turn may help forming positive attitudes of the implementers and the field staff to educate the rural masses.



Chi-square test of association was found to be significantly related to all personal and professional characteristics of VEA's of Bangladesh. As the age increased the degree of favourable attitudes also increased. This could be due to the fact that the younger VEA's did not realise the impact of population growth and its consequence as they were novice and did not have as much experience. VEA's having small size of family had less favourable attitude and the same was true for the variable of the type of family. All those who had nuclear and small families had less favourable attitude. This may be due to the reason that as they did not have to face the difficulties themselves, they did not see population education in proper perspective. Higher education and income were definitely related positively. Education might have helped to understand and internalize the concepts of population education and its importance in relation to their role in improving the quality of life of masses. People with higher education possessed higher degree of positive attitude. Training did not make much impact, though significantly related. Though the number of respondents following Hindu religions were small, they appeared to be having more positive attitude.

Attitudes of block development officers also were associated with the characteristics (personal and professional). Degree of attitude towards favourableness

Table 78. Chi-Square Values for Test of Association between all Levels of Extension Functionaries from the Country of Bangladesh towards Population Education and selected Personal and Professional Characteristics.

Characteristics	Village Extension Agents		Block Development Officer		Instructional Staff		District Extension Officer & Director of Agriculture			
	Chi-Square	df.	Chi-Square	df.	Chi-Square	df.	Chi-Square	df.		
									N = 389	N = 198
Age	38.09	12	.01	.01	53.24	10	.01	3.72	6	NS
Religion	22.22	2	.01	.01	47.22	2	.01	11.14	2	.01
Size of the family	47.26	8	.01	.01	29.44	8	.01	1.86	8	NS
Type of the family	81.31	4	.01	.01	7.50	4	NS	3.23	4	NS
Education	45.85	2	.01	.01	19.36	2	.01	11.14	2	0.9
Professional training	45.85	4	.01	.01	19.36	4	.01	11.14	2	.01
Income	51.70	12	.01	.01	38.70	10	.01	2.42	4	NS

increased with seniority in age. Respondents with nuclear families had more favourable attitude and the same was found to be true in the case of the size of the family.

Attitudes were more favourable with higher level of education and higher income whereas training did not seem to have any influence on attitudes. Respondents with pre-service, in-service and no training were equally distributed on degrees of attitudes. As for religion all were Muslims but there were differences in the degrees of favourable attitudes.

In the case of instructional staff, type of family was not significantly related but all the rest of characteristics were found to be related to attitudes. Age was negatively associated, but the type of the family and size of the family, education, income and training were positively associated. In the case of DEOs and DAs only religion, education and professional training seemed to have favourable influence.

Instructional staff are educators, therefore higher education equipments them to train better. Age and experience bring maturity, training enhances knowledge regarding the content and methodology. The same could be true for the DEOs and DAs as they are apt to take decision of education and training facilitates this role. Thus these could be the possible reasons of relationship.

Mean Scores on Attitude Obtained by Extension Functionaries  
of the Four Eastern States of India and the Country of  
Bangladesh.

In the comparison of Mean Scores among the extension functionaries of all levels, the village extension agents of Bihar in general (Table 79) obtained the lowest mean scores on attitude items. The VEAs scored lowest mean scores on physiological, physical factors and also on problems of family and health, employment, and the role of extension functionaries. There was not much difference between the mean scores of VEAs and BDOs. It were the BDOs who had obtained the lowest mean scores on economic factors, religious and psychological factors and small family norms. Therefore it indicates that amongst all the extension functionaries of all levels from Bihar, it is the VEAs followed by BDO who need maximum training with particular emphasis on meaning and scope, consequences and role of extension functionaries in imparting population education. Whereas in the case of BDOs, training in the factors which cause population growth should be emphasized and elaborately explained.

The directors of agriculture in general had obtained the highest mean scores but on aspects like religion and role of extension functionaries in imparting population education, it were the DEOs who had obtained the highest mean scores. On employment aspect it was the instructional staff who had

Table 79. Mean Scores on Attitude Obtained by Various Levels of Extension Functionaries from the State of Bihar on the Selected Units of Population Education.

Units of Population Education	VEA	BDO	IS	DEO	DA
Meaning and scope of population education	23.27	24.38	26.64	23.00	25
Social factors	25.16	25.78	30.07	28.87	34
Economic factors	15.67	14.66	16.78	20.18	21
Educational factors	21.72	21.08	22.07	25.31	28
Religious and psychological factors	23.21	20.53	24.21	26.50	25
Physiological and physical factors	9.96	10.10	8.14	11.31	15
Land and food	19.63	19.88	20.78	24.31	27
Family and health	30.54	33.68	32.21	36.25	34
Employment	16.30	17.05	18.64	17.87	17
Small family norms	43.65	43.43	44.85	52.87	56
Role of extension functionaries in imparting population education	62.11	66.30	66.21	70.25	64

obtained the highest scores. This leads to the conclusion that the extension functionaries need training in population education. This was also found to be true when the mean of individual statement was considered.

Table 80 indicates that the block development officers of Meghalaya obtained the lowest mean scores in general. Even the director of agriculture obtained low mean scores for that matter. It were the instructional staff who had obtained the highest mean scores on meaning and scope and factors responsible for population increase. On the rest of the aspects it were the directors of agriculture who had obtained the highest mean scores. On aspects like employment, small family norms and role of extension functionaries the VEAs had obtained the lowest mean scores. Thus the training need for the VEAs is indicated in these aspects in which they scored lowest mean scores.

The positive attitude of the instructional staff towards population education deserves appreciation because, the attitudes of teachers towards any phenomenon reflects in their teaching of that phenomenon. If the attitudes are positive, teachers will teach with greater interest and conviction. (

From the mean scores obtained in each aspect and sub-aspect for VEAs and BDOs of Meghalaya, it can be concluded that it was the BDOs followed by VEA who need the maximum training. BDOs need training in all aspects and sub-aspects except for the role of extension functionaries.

Table 80. Mean Scores on Attitudes Obtained by various Levels of Extension Functionaries from State of Meghalaya on the selected units of Population Education.

Units on Population Education	VEA	BDO	IS	DEO	DA
Meaning and scope of population education	24.79	21.04	27.50	23.50	28
Social factors	26.60	22.70	27.75	30.50	30
Economic factors	21.45	14.54	22.25	21.75	19
Educational factors	20.80	18.54	27.75	23.25	25
Religious and psychological factors	21.71	19.66	31.25	25.75	27
Physiological and physical factors	10.18	10.62	11.75	12.00	11
Land and food	19.58	18.70	23.75	23.25	22
Family and health	32.48	29.41	34.25	34.00	37
Employment	15.00	15.95	18.75	19.25	20
Small family norms	41.69	37.95	54.50	52.75	55
Role of extension functionaries in imparting population education	62.33	65.41	67.75	68.00	73

In the case of VEAs they too need training in all aspects though they scored better on the aspect of meaning and scope of population education.

The DAs too need some more information on economic, physical and physiological factors.

It was observed that amongst the extension functionaries of Tripura it was the instructional staff who had obtained higher mean scores in majority of aspects (Table 81) except for physiological factor. In these aspects the DEOs obtained higher mean scores. The lowest mean scores in majority of the aspects were those of the BDOs except in the case of employment and economic factors. But the DAs scored lower mean scores than the IS on many aspects.

The negative attitude of the higher level of extension functionaries causes concern because these higher level of extension functionaries are the planners, policy makers, and decision makers. Their negative attitude will be immediately reflected in their decisions. On aspects like meaning and scope of population education, all policy makers, i.e. BDOs, DEOs, and DAs, scored lower than the implementors that, is the VEAs. The BDOs under whom the VEAs directly worked obtained lower mean scores than VEA on the aspect of the role of extension functionaries. The DAs had also scored lower than VEAs. Such a situation might



influence their working efficiency. It will therefore be worthwhile to provide these extension functionaries further information in which they lack. This will help them to formulate more favourable attitudes which will in turn influence the success of the programme.

Table 81. Mean Scores on Attitudes Obtained by various Levels of Extension Functionaries from the State of Tripura on the selected units of Population Education.

Units of Population Education	VEA	BDO	IS	DEO	DA
Meaning and scope of population education	24.77	22.70	28.00	22.00	23
Social factors	26.57	21.88	29.25	27.75	29
Economic factors	13.42	13.52	21.00	19.00	19
Educational factors	23.42	20.23	28.00	23.25	25
Religious and psychological factors	20.00	19.70	32.50	23.00	26
Physiological and physical factors	11.10	10.29	11.75	12.00	9
Land and food	19.47	18.82	25.50	27.80	21
Family and health	33.20	31.00	38.50	38.00	34
Employment	16.70	17.17	20.00	19.00	16
Small family norms	41.55	38.64	56.00	53.00	46
Role of extension functionaries in imparting population education	67.60	61.11	70.50	71.25	63

The mean scores on attitude item of extension functionaries from the state of West Bengal in Table 82 indicates that the lowest mean scores were obtained by the block development officers followed by the VEAs. Though the highest mean scores were obtained by the director of agriculture on meaning and scope of population education and land and food, it was the instructional staff who had obtained the highest mean scores.

The low mean scores obtained by the VEA and BDO need attention because they are the ones who in fact would be dealing directly with the rural masses. Thus their knowledge and attitude will affect the programme. Their mean scores on small family norm and role of extension functionaries in imparting population education appeared to be less favourable indicating their negative attitude.

The success or failure of the programme depends on the extension functionaries like VEAs and BDOs. If these functionaries possess negative attitudes, the programme is bound to regress and fail. Thus they should be educated, trained, informed well and in right direction, so that they form more positive attitudes.

Table 82. Mean Scores on Attitudes Obtained by Various Levels of Extension Functionaries from the State of West Bengal on selected Units of Population Education.

Units on Population Education	VEA	BDO	IS	DEO	DA
Mean and scope of population education	24.10	20.46	25.25	25.15	24.00
Social factors	25.84	21.90	29.64	29.07	30.00
Economic factors	14.66	13.93	18.96	20.46	21.00
Educational factors	20.69	18.43	24.83	25.00	29.00
Religious and psychological factors	20.54	18.03	26.35	26.84	32.00
Physical and physiological factors	9.86	3.00	11.06	12.15	12.00
Land and food	18.76	18.43	24.45	24.07	24.00
Family and health	29.98	27.03	35.41	36.61	39.00
Employment	15.88	14.73	19.09	19.23	21.00
Small family norms	39.69	36.93	53.19	53.69	60.00
Role of extension functionaries factors in imparting population education	58.94	53.63	66.32	71.53	76.00

Table 83 indicates that it were the directors of agriculture who had obtained the lowest mean scores on meaning and scope of population education, economic factors, physiological and physical factors, land and food and family and health, though they had obtained the highest mean scores in general. It was on the aspects of family and health, educational factors, and meaning and scope of population education that the VEAs had obtained the highest mean scores. However, they had obtained lowest mean scores on the total aspects of population education, followed by the BDOs. It was only on the aspect of land and food that the BDOs had scored highest amongst all the other functionaries.

Though the ISs, DEOs and DAs had obtained higher mean scores compared to the total scores of 415, their mean scores were very low.

From the Table, it appears that the DAs need to clear their concept as to what population education is. In fact they need to be told more about the economic, physiological, and physical factors as they scored the lowest mean score in these areas. In fact all the levels of extension functionaries from the country of Bangladesh need further training in population education.

Table 83. Mean Scores on Attitude Obtained by Various  
Level of Extension Functionaries from  
Bangladesh on selected Units of Population  
Education.

Units of Population Education	VEA	BDO	IS	DEO	DA
Meaning and scope of population education	25.79	23.89	24.20	25.55	23.66
Social factors	27.78	26.46	26.50	27.05	28.00
Economic factors	19.13	17.16	17.85	18.44	14.66
Educational Factors	24.38	23.34	23.30	23.33	24.00
Religious and psycho- logical factors	22.82	24.10	23.52	24.66	30.66
Physiological and physical factors	10.83	10.64	10.74	11.33	8.00
Land and food	20.05	20.12	19.84	19.88	19.33
Family and health	35.15	31.65	33.92	32.83	30.66
Employment	10.40	16.82	17.61	17.61	16.66
Small family norm	32.15	48.07	49.85	49.27	54.00
Role of extension functionaries in imparting popula- tion education information	67.76	64.93	67.17	67.77	70.66

When comparison of the mean scores by the extension functionaries of Bangladesh and the four Eastern states of India were done, it was found that VEAs and BDOs of India scored low scores on almost all aspects which indicate that they had less positive attitudes towards population education. The possible reason could be that the VEAs and BDOs of Bangladesh had an opportunity to undergo a systematic training and so were better informed and knowledgeable and indicated more favourable attitude.

But all the higher level of the extension functionaries of India had scored high scores on majority of aspects indicating more positive attitude. This clearly indicates that for VEAs and BDOs and more so for VEAs training certainly is imperative. For other levels it did not show much difference. This leads to the conviction that for VEAs, training is most important to formulate more favourable attitudes.

Table 84. Mean Scores on Attitude Obtained by Various Levels of Extension Functionaries from India (Four Eastern States) on selected units of Population Education.

Units of Population Education	VEA	BDO	IS	DEO	DA
Meaning and scope of population education	23.90	22.65	26.00	23.70	25.00
Social factors	25.73	23.82	29.58	29.00	30.75
Economic factors	15.29	14.32	18.79	20.32	20.00
Educational factors	21.40	19.90	24.56	24.75	26.75
Religious and psychological factors	21.95	19.69	26.62	26.16	27.50
Physiological and physical factors	10.06	9.92	10.39	11.75	11.75
Land and food	19.37	19.19	23.50	24.45	23.50
Family health	30.96	31.03	34.71	36.32	36.00
Employment	15.97	16.33	19.19	18.62	18.50
Small family norms	42.04	40.32	51.30	53.16	54.25
Role of extension functionaries in imparting population education	61.71	62.56	66.71	70.56	69.00

4.3.3 Differences amongst the Attitudes of Extension Functionaries at all Levels of the Four Eastern States of India and the Country of Bangladesh regarding Population Education.

The difference of attitudes amongst the village extension agents of West Bengal and Bihar were significant. These differences may be due to socio-economic or cultural factors, or may be due to the differences in the population problems itself. These two States were big and are face the problems of over population, unemployment, poverty etc. In other states the differences were insignificant.

Amongst the block development officers there was no significant difference in BDOs of West Bengal and Meghalaya and Tripura. But it appeared that the differences were significant amongst West Bengal, Bihar, Meghalaya, Tripura and Bihar.

These differences could possibly be attributed to the communication process and facilities, remoteness of the place of posting and the kind of directives received from the higher officers.

There were significant differences amongst the instructional staff of all the states. The reason could be socio-cultural constraints, economic and educational background, or may be the extent to which the implementation of program has been emphasized.



Only the district extension officers and directors of agriculture of West Bengal, Meghalaya and Tripura differed in their attitudes. The operative factor in the differences could be that West Bengal faces an acute problem of population increase whereas the other two states so far do not face the problem so acutely.

When the differences in attitude among the extension functionaries of India (four Eastern States) and Bangladesh were calculated it was found that there was no significant differences between the attitudes of extension functionaries of the two countries at any levels. This could be due to the reason that the two countries face similar problems of population situation, its consequences, and the amount of Government pressure being exerted through development programme. Apart from the similarity of the problems, in India and Bangladesh, the approach to solve the problem was also similar i.e. involving the extension functionaries, taking advantage of the wide infrastructure and rapport with the rural families. There were the differences in the attitude of the extension functionaries of the two countries at different levels. These could be due to personal, educational or situational factors, the type of training, the emphasis on different aspects of population situation, etc.

Table 85. Differences in Attitudes of Extension Functionaries of the Four Eastern States of India.

Levels of Extension Functionaries	M <sub>1</sub>	SD	M <sub>2</sub>	SD	t Value	Df	Level of Signif- icance
<u>Village extension agents:</u>							
West Bengal 142							
Bihar 241	278.97	49.12	291.26	50.48	2.32	2	.05
West Bengal vs 142	278.97	49.12	293.13	37.75	1.57	2	NS
Meghalaya & Tripura 139							
Bihar vs 241							
Meghalaya & Tripura 139	291.26	50.48	293.13	37.75	.41	2	NS
<u>Block Development officers:</u>							
West Bengal vs 30							
Meghalaya & Tripura	252.33	47.83	274.80	51.71	1.83	2	NS
West Bengal vs 30							
Bihar 60	252.33	47.83	296.89	36.30	4.49	2	.01
Bihar vs 60							
Meghalaya & Tripura 41	296.89	36.30	274.80	51.71	2.26	2	.05

Table (contd..)

Levels of Extension Functionaries	M <sub>1</sub>	SD	M <sub>2</sub>	SD	t Value	df	Level Signif icance
<u>Instructional Staff</u>							
West Bengal vs 31 Meghalaya and Tripura 8	334.61	19.40	354.12	23.84	2.14	2	.05
West Bengal vs 31 Bihar 14	334.61	19.40	310.64	38.97	2.18	2	.05
Bihar vs 14 Meghalaya and Tripura 8	310.64	38.97	354.12	23.84	3.25	2	.01
<u>District Extension Officers</u> DA							
West Bengal vs 14 Meghalaya and Tripura 10	345.57	18.58	370.77	19.25	3.11	2	.01
West Bengal vs 14 Bihar 17	345.57	18.58	336.75	84.85	0.39	2	NS
Bihar vs 17 Meghalaya and Tripura 10	336.75	84.85	370.77	19.25	1.49	2	NS

Table 86 . Differences in the Attitudes Possessed by all  
Levels of Extension Functionaries from Four  
Eastern States of India and the Country of  
Bangladesh towards Population Education.

Levels of Extension Functionaries	M <sub>1</sub>	SD	M <sub>2</sub>	SD	t Value	Level of Signif- icance
Village Extension Agents N = 389+522	296.27	33.19	289.79	147.68	.969167	NS
Block Development Officers N = 198+131	307.24	45.58	281.81	284.25	1.0151639	NS
Instructional Staff N = 63 + 53	314.55	27.23	278.00	164.34	1.6008968	NS
District Extension Officers N = 18 + 37	316.77	22.95	163.67	163.71	.803774	NS
Director of Agriculture N = 3 + 4	320.33	70.86	343.00	20.45	.5374376	NS

The mean scores obtained by all levels of extension functionaries from the country of Bangladesh also indicated training needs in almost all aspects. There appears to be a conflict right from its meaning and scope to what extent it should be given importance. If the VEAs who are to implement the programme were themselves uncertain as to its importance, the future of the programme could well be foreseen.

It was very interesting to observe that in Bangladesh, the training programme on population education for VEAs especially, is carried out in a systematic, organized manner. They are even called for the pre-service and in-service training unlike in India. But still the attitudes of the extension functionaries of Bangladesh do not appear to be positive. Thus before going to further details it is worthwhile to mention that the way in which this training is being imparted needs to be examined.

Almost all extension functionaries need further training in meaning and scope and demography so as to help them to formulate better attitude. Since their attitudes were more towards positive side, it could further be reinforced.

Inspite of the fact that they possessed more positive attitudes to<sup>ward</sup> social factors, there were a few items like

role of social tradition and customs in decision making which needs to be explained further.

The extension functionaries need further explanation on economic factors and in what manner they affect people and how to enable them to form favourable attitude.

On religious, physiological, physical and psychological factors, they appeared to be having clear and positive attitudes. Yet their training need to strengthen these attitudes can not be ruled out.

Consequences of population growth appear to be negatively responded by all except the DEOs. It was expected that the functionaries from Bangladesh will have better and more positive attitude as 3/4 of Bangladesh is under water and provides very little land for cultivation. But it seems they have not realised it fully. Thus they should be enlightened, as the food shortage will be more acute if the population is not checked now.

They had a more positive attitude towards family and health. But on employment the VEAs responded negatively indicating a need for further training. All extension functionaries obtained low scores towards small family norm which indicates that they need to know more about the advantages of small family.

Training needs to be more intensive on the aspect of the role of extension functionaries in imparting population education. They appeared to be all confused on this aspect.

Thus, it could be concluded that extension functionaries need more extensive and intensive training on almost all aspects of population education. If the objective to educate more and more people on population education through extension functionaries is to be achieved, the extension functionaries need to have clear knowledge, right concept and positive attitude. Then only they can work with dedication. For this reason education or knowledge through training is most needed.

4.4.4 Relationship between Knowledge and Attitudes of  
Extension Functionaries of the Four Eastern States  
of India regarding Selected Aspects of Population  
Education

It is assumed normally that knowledge and attitude are interrelated. When an individual possesses right knowledge about a phenomenon or object it helps in formulating in him the right attitude.

Table 87 and 88 indicate that knowledge regarding selected aspects of population education and attitudes of extension functionaries of the four states of India and the country of Bangladesh at all level were highly correlated.

It was found in the scattergram that those who had higher level of knowledge had positive attitudes. It may be inferred that people who had better knowledge having wider horizon of experience had positive attitudes.

Thus such people after giving a pre-test could be identified and selected for further training and to impart population education to rural masses.



Table 87. Relationship between the Knowledge and Attitudes of Extension Functionaries of India regarding selected aspects of Population Education.

Extension Functionaries	r Value	df.	Level of Significance
Village extension agents	0.67	520	.01
Block development officers	0.71	129	.05
Instructional staff	0.70	51	.01
District extension officers	0.69	35	.01
Directors of agriculture	0.72	2	.01

Table 88. Relationship between the Knowledge and Attitudes of Extension Functionaries of Bangladesh regarding selected aspects of Population Education.

Extension Functionaries	r Value	df.	Level of Significance
Village extension agents	0.68	387	.01
Block development officers	0.69	196	.01
Instructional staff	0.67	61	.01
District extension officers	0.70	16	.01
Directors of agriculture	0.70	1	.01

#### 4.5 Suggested Curriculum on Population Education

Rural development programmes are planned and implemented for influencing people to make changes in their way of living and of making a living. The existence of such programmes implies that the present condition of the rural people is not what it should be. It is possible and feasible for a person or a group of persons, officials and non-officials or a combination of both to identify the optimum physical conditions, desirable attitudes to imbibe the concept of population education and urge to implement it should prevail, and desire to adopt means for achieving them. Hence, the entire process of planning for rural development implies a need for change. Changes that are important to people are those that help them to meet their needs of all kinds. The question arises as to how to identify their needs; how to define the ideal conditions; the agencies to implement; to define areas of implementation and the methodology to be adopted to implement the population education as a national programme.

The first step to any systematic attempt to promote rural development is to devise an effective result-oriented programme. The term programme indicates focus, priority and design. Effective programme for rural development just done not evolve by academic exercise but they have to be planned with a vision.

Population education is one of the most important

programme for ensuring a minimal optimum standard of living for rural population. It further aims at making life in rural India and Bangladesh more productive and qualitatively rich. But in the existing circumstances it appears imperative to utilize the services of the already existing executive infrastructure of which extension functionaries form the core their job, as it is envisaged is to inform these people to build up an awareness, develop interest and motivate rural people to accept small family as a basic requirement to achieve these goals. The extension functionaries therefore need to have a comprehensive understanding of population education and to be trained systematically during the pre-service training and reinforce their knowledge during the in-service training programmes.

For the extension functionaries it would be more advantageous to acquire the knowledge regarding population education during pre-service training. More emphasis needs to be placed on meaning and scope of population, factors responsible for population increase and consequences of the population growth. They need to be explained how with their rapport with the rural folks they can function as catalysts to achieve these goals effectively and rapidly. It's a race against time and any compromise on the time scale would lead the entire population programme into a dream.

As an integral part of this programme, a course(s) has to be prepared with a pre-tested set of objectives, syllabus,

and a well defined training programmes. It is in the area of curriculum development that the investigator, on the basis of her findings, is in a position to make some tangible recommendations. They are as follows:

1. That, since there is no structured curriculum on population education for the extension functionaries of India, devising such a curriculum on the basis of those findings should be possible and prepared. This means including population education as one of the components of the extension functionaries training programme in India.
2. Whereas, such a component is included in the syllabi of the training programme of extension functionaries of Bangladesh, it needs revamping and modifications.

It is suggested that the component of population education in the syllabi of the extension functionaries of Bangladesh, being rather sketchy needs to be made more comprehensive.

The suggested curriculum is based on the following major findings:

1. The village extension agents of Bangladesh had relatively poor knowledge on the first unit of population education which consisted of meaning and scope of population education and demography, as compared to their counterparts of India.
2. Extension functionaries of India, except the category of

the director of agriculture, had poor knowledge on factors responsible for population growth as compared to the functionaries of Bangladesh.

3. VEAs, BDOs and ISs of India had poor knowledge on consequences of population growth than that of Bangladesh. While the DEOs and DAs of India had better knowledge on this score.
4. BDOs and DEOs of Bangladesh scored less on methods of limiting the family size as compared to their Indian counterparts.
5. Functionaries of India scored better on ways to educate people regarding adoption of small family norm.
6. On the aspect of the role of extension functionaries in imparting population education, functionaries of Bangladesh scored low.
7. VEAs and BDOs of India had less favourable attitude on almost all aspects of population education.
8. Exception to these generalization are the higher level of executive of the ranks of ISs, DEOs and DAs.

# A Model Curriculum on Selected Aspects of Population Education for the Extension Functionaries of the Four Eastern States of India and the Country of Bangladesh

Objectives	Concepts and Generalizations
1. To develop an understanding of the meaning of population education.	<p>Population education is an educational programme designed to equip the individual with knowledge, understanding and skills that will enable him to assess population situation in terms of the problems, his family, community and nation in general might have to face.</p> <p>Population education aims at creating awareness of the relationship between the population and development of a community both at macro and micro levels.</p> <p>Population education is not a synonym for sex education or family planning. People in general associate population education with family planning and sex education. Family planning is included in the curriculum as a component of population education.</p> <p>Because of the cultural taboos and inhibitions associated with sex, people hesitate to discuss population education also.</p> <p>Population education concerns awareness, and understanding of the nature of causes and implications of population growth.</p> <p>It also aims at creating favourable attitudes for adoption of small family norms.</p> <p>The following general level objectives are also indicative of the scope of population education:</p> <p>Population education seeks to increase awareness and understanding of:</p> <ul style="list-style-type: none"> <li>- basic demographic processes as applied to one's family, country, and the world.</li> <li>- effects of population growth on the social, economic and environmental life of the society.</li> </ul>
2. To understand the objectives and scope of population education.	

Objectives	Concepts and Generalizations
	<ul style="list-style-type: none"> <li>- population and family size, pressure on quality of life, factors, such as food and nutrition, health, education and housing and employment.</li> <li>- Dynamics of population that the individual influences through his behaviour; age of marriage, birth of the first child, spacing of children, urbanization, and the dynamics of population that affects him as a recipient or member of society: population growth rates, dependency ratio, socio-economic conditions, etc.</li> </ul>
3. To understand the concept of dynamics of population and its impact on human life.	<p>The term 'dynamics of population' refers to change in the growth patterns and distribution of people over a given area and time period.</p> <p>The patterns of population change are described by population statistics.</p> <p>The population growth rate in India is 2:5. 55 thousand babies are born every day, and it adds to 13 million people every year.</p> <p>The density of population of India is 221/sq.km.</p> <p>The population growth rate in Bangladesh is 2.7; 10,080 babies are born every day, and it adds 2.3 million babies every year.</p> <p>The density of Bangladesh is 956.25/sq.km.</p> <p>The use of population statistics is important in population education as it reveals the size, compositions and distribution of a population; as influenced by the processes of fertility, mortality and migration; and attempts to describe causes and consequences of population change.</p> <p>Change in size and distribution of population affects the economic and social life of a nation, state or area.</p>
4. To recognize the impact of socio-cultural factors on population growth.	<p>Population change affects and is affected by socio-economic-cultural environment.</p> <p>Following are some of the socio-cultural factors which have been identified as contributing to parents' desire for more children:</p> <ul style="list-style-type: none"> <li>- high infant mortality rate.</li> </ul>

Objectives	Concepts and Generalizations
	<ul style="list-style-type: none"> <li>- number of males desired or specific sex ratio.</li> <li>- higher social status due to large families.</li> <li>- security in old age.</li> <li>- early marriages.</li> <li>- joint family system.</li> </ul> <p>The impact of socio-cultural factors is considered to effect fertility through a change of values relative to number of children and child bearing, as other opportunities and potentials become more desirable than additional children.</p> <p>This change in motivation towards fertility tends to occur in an environment in which a measure of socio-cultural development has occurred.</p>
5. To recognize the impact of educational factors on population growth.	<p>Education has a strong impact on fertility; people with low level of education are superstitious and fatalistic. This attitudes tends to increase family size.</p> <p>Parents with less education are less inclined to encourage their children to higher education, which in turn contributes to desire for large family.</p> <p>Large families cannot bear the burden of educating their children.</p> <p>Over population provides less opportunities for education to all children.</p> <p>The number of schools and teachers may not proportionately increase as rapidly as high population growth demands.</p> <p>Illiteracy hamper the speed of national development.</p>
6. To recognize the impact of economic factors on population growth.	<p>A country's economic status depends on agriculture, animal husbandry and industry.</p> <p>High birth rates and lower mortality lead to a increasing the dependency ratio.</p>



Objectives	Concepts and Generalizations
	<p>Population increase with more dependent consumers and statis or slow growing production rate will decrease the per capita income.</p> <p>Poverty or lower quality of life can result from a high rate of population.</p> <p>Majority of the country's population is agrarian. Replacement of farm labour with family members saves wages and leads to the desire to have large families.</p> <p>Many members in a family means many earning hands, thus better living standard. This makes one desirous of large family.</p> <p>Religion plays an important role in social life. Religious beliefs and attitude such as given below become barriers in adopting small family norm and results in population increase:</p> <ul style="list-style-type: none"> <li>- girls are married before the onset of puberty.</li> <li>- boys help parents to go to heaven.</li> <li>- boys alone are entitled to religious rites thus a couple must have a boy.</li> <li>- interrupting conception is insulting God.</li> </ul> <p>Large families also exist due to the psychological belief that:</p> <ul style="list-style-type: none"> <li>- married people, if refrain from sex, will suffer from mental tension and that will affect their health.</li> <li>- use of contraceptive causes frustration thus imbalances emotional state of the couples, resulting in frequent pregnancies.</li> <li>- if males undergo operation, they become impotent, and lose virility.</li> <li>- women after operation become incapable of doing household tasks and this affects the family life.</li> </ul>
7. To recognize religious and psychological factors as a cause of population growth	

Objectives	Concepts and Generalizations
8. To comprehend the implications of population growth on land and food, housing conditions and health.	<p>Rapid population growth renders a large number of people landless which creates many problems in basically agrarian societies like India and Bangladesh.</p> <p>When population grows more land is utilized for construction of houses, roads, schools, hospitals etc. but as no new land area is possible to be added, less and less land is available for cultivation, which brings down the production.</p> <p>Due to the social system of distribution of property, large family leads to greater fragmentation of lands. Fragmentation of land resulting in small size farms, which are uneconomical for production and management. It also increase the wastage of land.</p> <p>Rapid population growth affects food availability and the quality of food consumed by people.</p> <p>Poor quality of food consumption accentuates under and malnutrition. Undernutrition and malnutrition affect health, which in turn affects the working ability on farms, resulting in less production.</p> <p>Over population influences the living pattern. Small, improper ventilated houses in congested area lead to poor health.</p> <p>Over population leaves less pace to build parks and gardens which are essential for a proper growth and health of children and adults.</p> <p>Large families cannot afford good, big houses with plenty of fresh air and proper ventilation.</p> <p>Health depends on factors like:</p> <ul style="list-style-type: none"> <li>- nutritional standards.</li> <li>- physical and social environments.</li> <li>- family income.</li> </ul> <p>Small congested house leads to poor mental and physical health which might increase social maladjustments.</p> <p>Medical and health facilities may not correspond with high population growth.</p>

Objectives	Concepts and Generalizations
9. To comprehend the need of promotion of family planning.	<p>There is a relationship between the standard of living and the income.</p> <p>Employment type and income are related. Job opportunities may not increase as rapidly as population growth.</p> <p>In the agrarian societies unemployment is more.</p> <p>Since agriculture is a seasonal occupation, it does not provide regular employment to a majority of people.</p> <p>Irregular and small income affect the living standard. Limited resources are spent on maintaining the subsistence level of the members of a large family.</p> <p>Industries are developing at a slow speed and cannot provide employment to all with the speed with which the population is growing.</p> <p>Over population contributes significantly to social deformation, political instability, and deteriorations in the economic status of the society.</p> <p>Family planning as is based on the concept of family welfare.</p> <p>The essential objective is to ensure better health of mother and child and promote welfare of the family.</p> <p>Family planning educates an individual in how to plan one's total life in all aspects keeping in view the available resources to him, and not merely propagate or adopt contraceptives.</p>
10. To be able to recognize different contraceptive methods.	<p>Different contraceptive methods can be broadly divided in the following categories:</p> <ul style="list-style-type: none"> <li>- <u>Repetitive methods</u>: Abstinence, rhythm, coitus interruptus, condoms, diaphragm, cream jellies, foam tablets, pills, etc..</li> <li>- <u>Semi-permanent methods</u> like IUD and loop, etc..</li> <li>- <u>Permanent methods</u>: Clinical operations like Tubectomy and Vasectomy.</li> </ul>

Objectives	Concepts and Generalizations
11. To develop an appreciation for small family norm.	<p data-bbox="310 436 372 1552">A small family consists of parents and two or three children irrespective of their sex.</p> <p data-bbox="383 311 445 1552">Family size as has been indicated by researches has a strong impact on resources, human and non-human, within the family unit.</p> <p data-bbox="455 536 488 1552">Following are some of the advantages of a small family:</p> <ul data-bbox="505 332 735 1552" style="list-style-type: none"> <li>- planned families lead better life.</li> <li>- irrespective of social and economic status small family provides better social and emotional security.</li> <li>- small family can provide better facilities for education, food, clothing, etc.</li> <li>- small family provides better health for family.</li> </ul> <p data-bbox="752 385 814 1552">The solution to the problem of population explosion is adoption of small family norm.</p> <p data-bbox="831 560 865 1552">The objective of small family norm can be attained by:</p> <ul data-bbox="882 460 954 1552" style="list-style-type: none"> <li>- creating awareness of population situation in the masses.</li> <li>- educating them about the family planning methods.</li> </ul> <p data-bbox="971 367 1060 1552">All advantages of small family should be brought under limelight to influence people. This will be more beneficial and can be effectively used for mass communication.</p> <p data-bbox="1076 367 1139 1552">Small families should be identified and mentioned or appreciated in public.</p> <p data-bbox="1155 332 1218 1552">Documentary films on local, small families should be made to highlight the advantages of small family.</p> <p data-bbox="1228 311 1290 1552">Financial incentives should be provided (only initially) for people who adopt small family.</p> <p data-bbox="1307 460 1369 1552">Discussion on benefits of small family by experts should be organized at different levels for potential couples.</p> <p data-bbox="1379 402 1448 1552">Small exhibitions showing disadvantages of big families and on population education should be arranged for villages.</p>

Objectives	Concepts and Generalizations
12. To understand the various methods for educating people regarding population education	<p>For any new idea like small family norm, a well planned diffusion of message is essential.</p> <p>This diffusion could be through the use of various media.</p> <p>Awareness of small family could be created through personal contents.</p> <p>Personal contacts by the extension worker with the farm family will help in gaining confidence and discussing the delicate issue of family size.</p> <p>The method can be used for the family which is most responsive and ready to accept advice. In personal contacts if need be, the skill can also be taught or explained to keep the family small.</p> <p>For a new idea like small family, if it is desired to be adopted by people, cause and effect should be explained.</p> <p>Message regarding small family should be motivational. This will influence people's decision and adoption of small family. For such a message mass methods like general meetings will be best suited. In general meetings there are heterogeneous people, thus the message could be passed for consideration and future action.</p> <p>People are the basis, means and ends of a society's purpose. The welfare of people is in the intended or stated purposes of extension work.</p> <p>As the extension worker strives to increase the agricultural production by educating people regarding better methods of cultivation he can ingrain in his package of education that however much the farmers produce, it will improve their level of living only if they have small families and which will facilitate more saving.</p> <p>Extension workers can act as teachers and advisors to masses for population education concepts and can motivate them to adopt small family norm</p>
13. To appreciate the role of extension functionaries in imparting population education to masses.	

Reading References for Population Education

1. Khan, A.W. and Rikhabdas, F.H. Population education in agricultural extension. A hand-book for Extension Workers. Directorate of Extension (Extension and Management), Dhakka, 1972.
2. Mehta, T.S. National Seminar on Population Education, New Delhi, NCERT, 1969.
3. Mehta, T.S. and Ramesh Chandra (Eds.) Population Education : Selected readings. New Delhi, NCERT, 1972.
4. Kammath, M.S. (Ed.) Extension Education in Community Development. New Delhi, Directorate of Extension, Ministry of Food and Agriculture, 1961.