

Training Needs of Farmers about World Trade Organization Issues

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ABSTRACT

In the present study, efforts were made to assess the awareness level and its correlate with the selected variables among the farmers on World Trade Organization (WTO) issues with special reference to agriculture and also to ascertain the training needs. The study was carried out in the state of Maharashtra and multistage random sampling technique was used for the selection of the respondent farmers. The results revealed that the overall awareness level of farmers on WTO issues related to agriculture was very low. Farmers' education, mass media exposure, social participation and extension contact were found to have positive and significant correlation with their awareness about WTO. Farmers were found to be unaware not only about the structure and functions of WTO, its origin and purpose etc. but also about the provisions under the Agreement on Agriculture and other Intellectual Property Related issues such as the system of plant variety protection in India in general and the Protection of Plant Variety and Farmers Rights Act, 2001 in particular. The present investigation concluded that farmers must be given training on every basic aspects of WTO.

Keywords: Agriculture, farmer, WTO, awareness, training needs

Even after several years of the institution of World Trade Organization (WTO), its mode of operation and the resultant impact of globalization did not reach the masses. European Commission (2001) identified that 65% of the farmers and 77% of the general public had heard nothing about the trade discussions with the World Trade Organization (WTO) and only a very small proportion of either group mentioned that they were well informed on the subject. Thus, a condition of WTO illiteracy prevails among the general public and specifically the farmers. Kumar and Singh (2008) reported that the export of Indian apple, in value terms, registered a decline of 19.25% during 1995-2002 i.e. post WTO era, demonstrating challenges that WTO regime has given birth to. Similarly, Samal and Behera (2004) stated that the quantities and the values of exports of *basmati* and non-*basmati* rice had considerably increased in the post WTO regime, signifying the opportunities that Indian agriculture can harvest in

future. No doubt, WTO has larger implications for Indian agriculture and farmers, but the issues of WTO are more confined to social sciences in general and economics in particular.

WTO regime leaves none out of its umbrella, keeping farmers' at the most vulnerable end. Considering this, the present study was conducted to not only assess the awareness level and its correlate with the selected variables among farmers on WTO issues with special reference to agriculture but also to ascertain the training needs of the farmers.

Methodology

An exploratory field research design was used for determining the awareness level of the farmers. The study was carried out in Maharashtra and random sampling technique was used for the selection of Districts, *Tehsils* and Villages. Twenty farmers from each selected village were selected through

random sampling method, making a total sample size of 60 farmers. A standardized awareness test was developed for assessing the level of awareness of the farmers. The reliability of awareness test was calculated with the SPSS and the Cronbach Alpha coefficient was found as 0.833 and validity was confirmed by judges' opinion.

Awareness mean score was calculated using the formula suggested by Singh *et al.* (2011) and Raina *et al.* (2014).

$$AMS\ i^{th} = \frac{Act\ ith}{Max\ ith}$$

Where,

AMS *i*th = Awareness mean score for *i*th statement

Act *i*th = Total actual score obtained for *i*th statement

Max *i*th = Maximum possible score for *i*th statement

Training needs gap was calculated using the formula suggested by Singh *et al.* (2011).

$$TNP\ i^{th} = (1-AMS\ i^{th}) \times 100$$

Where,

TNP *i*th = Training need percentage for *i*th statement

AMS *i*th = Awareness mean score for *i*th statement

Data were primarily collected by survey method and interview schedules were the major tools used for data collection.

RESULTS AND DISCUSSION

The study revealed that about 93% farmers had very low level of awareness about WTO and its agriculture related aspects, while about seven per cent had low level of awareness (6.67%). This shows a very poor level of awareness about WTO among the farmers and there was a wide variation in the awareness levels (Table 1 and Table 2). This situation is not just in India. A study by European Commission (2001) also shows that 77% of the general public had heard nothing about the trade discussions with the WTO.

The study also revealed that education, social participation, mass media exposure and extension contact had a positive and significant relationship with farmers' awareness about WTO and its agriculture related issues (Table 3). On similar lines,

Siddiqui *et al.* (2005) in their study, observed that 40 percent of the teaching staff and 60 percent of the researchers came to know about WTO through electronic media, showing significance of electronic media for general awareness.

Table 1: Categorization of farmers based on awareness level (N=60)

Sl. No.	Categories (Awareness index)	Frequency	Percentage (%)
1	Very high (81 – 100%)	0	0.00
2	High (61- 80%)	0	0.00
3	Medium (41 – 60%)	0	0.00
4	Low (21 – 40%)	4	6.67
5	Very low (0 – 20%)	56	93.33

Table 2: Farmers' awareness about WTO and its agriculture related issues

Dimensions	Mean	Std. Deviation
Evolution and objectives of WTO	0.32	0.81
Structure and functions of WTO	0.02	0.13
Tariffs and quantitative restrictions	0.28	0.52
Agreement on Agriculture issues	0.25	0.57
Intellectual property rights issues	0.12	0.49

Moreover, Thanh (2004) reported that there were no differences between respondents' awareness levels about WTO owing to their rural or urban background and majority of the respondents received information related to WTO from newspapers, magazines, and journals. The present study and other mentioned studies clearly indicate the role of mass-media, specifically the electronic media for better awareness about WTO among the masses.

Table 3: Correlates of farmers' awareness about WTO and its issues

Sl. No.	Independent Variables	Correlation coefficients Value (r)
1	Age	-0.301
2	Education	0.615**
3	Farming Experience	-0.321
4	Annual Income	0.144
5	Land Holding	0.243
6	Social Participation	0.603**
7	Mass-Media Exposure	0.691**
8	Extension Contact	0.513**

** significant at 0.01% level

Training needs referred to the awareness gap of the farmers, which is the difference between the actual level and the desired level of awareness of farmers about WTO and agriculture related aspects. The data in Table 4 shows that the dimension 'Structure and functions of WTO' was found to be the most important training need of farmers with gap of 99.44%. It was followed by 'Intellectual property rights issues' with gap of 98.33%, 'Agreement on Agriculture issues' with gap of 95.83%, 'Tariffs and quantitative restrictions' with gap of 92.92% and 'Evolution and objectives of WTO' with gap of 92.08%.

Table 4: Training needs of farmers with respect to WTO and its agriculture related issues

Dimensions	Awareness Mean Score	Training needs gap (%)	Rank
Evolution and objectives of WTO	0.08	92.08	V
Structure and functions of WTO	0.01	99.44	I
Tariffs and quantitative restrictions	0.07	92.92	IV
Agreement on Agriculture issues	0.04	95.83	III
Intellectual property rights issues	0.02	98.33	II

Table 5: Training needs of farmers with respect to WTO and its agriculture related issues

Sl. No.	Statement	Awareness Mean Score	Training needs gap (%)
1	WTO as an organization to look after trades between nations	0.17	83.33
2	GATT being an organization for trade regulations	0.03	96.67
3	Establishment of WTO	0.02	98.33
4	India as a member of WTO	0.10	90.00
5	Way of settling disputes at WTO	0	100
6	WTO dealing with trades in goods and services	0.02	98.33
7	Ministerial council as the topmost decision making body of WTO	0	100
8	Concept of 'Free market'	0.07	93.33

9	Specific circumstances to restrict trade	0.03	96.67
10	Tariffs being duties imposed both on imports and exports	0.00	100
11	Condition of quality standards for trade	0.18	81.67
12	Agreement on Agriculture reforming trade in agricultural products	0	100
13	Agreement on Agriculture striving for equal market access to domestic and imported products	0	100
14	Agreement on Agriculture aiming to reduce subsidies and protection given to agriculture	0	100
15	Conditions for providing supports to agriculture	0.02	98.33
16	Non-liability of Minimum Support Prices and support for agricultural for reduction commitments	0.2	80.00
17	India not providing any product specific subsidies to farmers	0.03	96.67
18	IPRs providing legal protection to creations of human minds such as films, books, designs of machines, etc.	0.03	96.67
19	Various types of intellectual property rights	0.05	95.00
20	Patentability of plant varieties in India	0.00	100.00
21	Plant Breeders' Rights being the IPR for plant variety protection in India	0.00	100.00
22	Plant Breeders' Rights not restricting access of plant materials for furthering research	0.00	100.00
23	Farmers' Rights allowing use of seeds for farmers but restricting sell as branded seed material	0.03	96.67
24	Novelty of a variety with distinctiveness and essential characters as a condition for its legal protection	0.00	100.00

The results revealed that the most important training need under evolution and objectives of WTO was about the establishment of WTO with 90% training needs gap followed by GATT being an organization for trade regulations (96.67%), India as a member of

WTO (90.00%) and WTO as an organization to look after trades between nations (83.33%). Similarly, the most important training need about the structure and working of WTO was the way of settling disputes at WTO and Ministerial council as the topmost decision making body of WTO both with 100 training needs gap, followed by WTO dealing with trades in goods and services (98.33%).

The most observed training need under tariffs and quantitative restrictions was awareness about tariffs being duties imposed both on imports and exports with 100 training needs gap, followed by specific circumstances to restrict trade (96.67%), concept of 'Free market' (93.33%) and condition of quality standards for trade (81.67%). Further, the most noticeable training needs about agreement on agriculture issues were Agreement on Agriculture reforming trade in agricultural products, Agreement on Agriculture striving for equal market access to domestic and imported products and Agreement on Agriculture aiming to reduce subsidies and protection given to agriculture with 100% training needs gap. They were followed by conditions for providing supports to agriculture (98.33%), India not providing any product specific subsidies to farmers (96.67%) and non-liability of Minimum Support Prices and support for agricultural for reduction commitments (80.0%).

The most evident training needs under intellectual property rights issues with 100% training needs gap were patentability of plant varieties in India, Plant Breeders' Rights being the IPR for plant variety protection in India, Plant Breeders' Rights not restricting the access of plant materials for furthering research and novelty of a variety with distinctiveness and essential characters as a condition for its legal protection. They were followed by IPRs providing legal protection to the creation of human minds such as films, books, designs of machines, etc. and Farmers' Rights allowing the use of seeds for the farmers but restricting to sell as the branded seed material with training needs gap is 96.67. Various types of intellectual property rights (95%) were the last training need. Vidyasagararya (2003), in his study on knowledge about Intellectual Property Rights (IPR), reported that only 51% of the students had good knowledge that was followed by assistant professors (43.6%), professors (42%) and associate professors (40.9%).

CONCLUSION

The overall awareness level of farmers on WTO issues related to agriculture was at a very low level. Farmers were particularly ignorant about the existence of WTO and its various aspects. The present study revealed that farmers' education, mass media exposure, social participation and extension contact had positive and significant correlation with their awareness and knowledge about WTO. However, their age, experience and land holding size did not show any significant correlation with the awareness level. The study also revealed that WTO being an organization for administering trades between nations, its precursor GATT, India as a member of WTO and aims of WTO are the areas where farmers had higher training needs gap. Similarly, basics of WTO structure, ways of trade negotiations and dispute settlement, and the process of decision making in WTO are other major aspects of WTO about which the farmers were mostly unaware of. Farmers also had training needs gap in the basic types of IPRs, system of plant variety protection in India and specifically the PPVFR act, 2001.

The present investigation concluded that farmers must be given training on every basic aspects of WTO and its agriculture related issues which have larger implications for international trade in general and Indian agricultural trade in particular. Considering the extent of training needs gap they must be provided with self-instructional materials on the topic.

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