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Dr. Meghna Kashyap

Research Scholar, Directorate of Research (Agri.), Assam Agricultural University, Jorhat India

Dr. Sayanika Borah

Assistant Professor, Dept of EECM, College of Community Science, Assam Agricultural University, Jorhat India

Strategic communication for behaviour change and social impact: Assessing farmers' attitudes and practices towards doubling farmers' income

Meghna Kashyap¹, Sayanika Borah²

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ABSTRACT

ABSTRACT: Doubling Farmers' Income (DFI) represents a key developmental objective of the Government of India, focusing on strengthening the economic well-being of farming households by enhancing agricultural productivity, improving resource-use efficiency, promoting diversification, increasing market returns and expanding livelihood opportunities. The Ashok Dalwai Committee, established on 13 April 2016, outlined seven key pathways for raising farmers' income, including increasing crop productivity, enhancing livestock productivity, improving resource-use efficiency, increasing cropping intensity, diversifying agricultural activities, securing remunerative prices for farm produce, and encouraging a transition towards non-farm occupations. The successful realization of these pathways depends not only on technological and economic measures but also on effective communication, improved knowledge, positive attitudes and behavioural changes among farming communities. Strategic communication can therefore play a vital role in addressing information gaps, overcoming behavioural constraints and facilitating the adoption of income-enhancing practices for sustainable agricultural and social development. The present study was conducted to assess attitude and practices related to Doubling Farmers' Income and to identify communication needs for promoting favourable behavioural changes. The study covered three agro-climatic zones of the Brahmaputra Valley of Assam, namely the Upper, Central and Lower Brahmaputra Valley Zones. Jorhat, Morigaon and Kamrup Rural districts were selected from the respective zones. Two villages were randomly selected from each district, with 40 farmers selected from each village, resulting in a total sample of 240 respondents. Data were collected using a structured interview schedule. The interview schedule consist of 20 statements regarding attitude of the farmers towards doubling farmers income. Less than half (44.58%) of the respondents had a moderately favourable attitude towards Doubling Farmers Income followed by 42.08 per cent of the respondent had least favourable attitude towards doubling farmers income and only 13.33 per cent of the respondents had highly favourable attitude with a mean score of 84.62 which can depict that favourable attitude of the respondents towards doubling farmers income. Half of the respondents (52.69%) of the respondents had medium level of practice on doubling farmers' income followed by 43.98 per cent had low level and only 3.32 per cent have high level of practice on doubling farmers income with a mean score of 20.97

Keywords: Doubling farmers income, Behaviour change communication, Social Impact, Attitude, Practice

1. INTRODUCTION:

India's economy is based on agriculture. Nearly half of India's population relies on agriculture to survive. Increased production of agriculture and improved food security has been the primary focus of an earlier strategy for developing India's farming sector. However, farmer's income needs to double in order to support farming welfare, ease farm difficulties and attain equalities between the incomes earned by farmers and those resulting from agriculture or other sources. There may be novel strategies and some policy changes needed to achieve doubling the income of farmers. One of these could be identification and targeting for those farmers who do not have a sufficient income. The aim of doubling farmers' income would not be achieved without identifying those who, within the farming sector, are economically disadvantaged because of access to technology, credit, markets, infrastructure and information. Increases in overall production, maximum price realization on the markets, a reduction in production costs, product diversification, efficient management of harvested crops, etc. can double farmers' income (Doubling farmers income (Rationale, Strategy, Prospects and Action Plan), Niti Aayog Policy paper No 1/2017, March 2017) [1]. India is well-known for Social and Behaviour Change Communication (SBCC) is the strategic use of communication approaches to promote changes in knowledge, attitude, norms, beliefs and behaviours. The term

Corresponding Author:

Dr. Meghna Kashyap

Research Scholar,
Directorate of Research
(Agri.), Assam Agricultural
University, Jorhat India

terms BCC and SBCC are interchangeable and they both refer to the coordination of messages and activities across a variety of channels to reach multiple levels of society including the individual, the community, services and policy. In order to influence social dimensions of health and wellbeing, practitioners formulated a strategic, systematic and targeted communication approach and coined the term Social and Behaviour Change Communication (SBCC). Earlier models like IEC used a linear “Expert–learner” or “Sender–Receiver” paradigm to transfer information. The focus then shifted to BCC, which emphasizes analysis of behaviours and determinants to affect changes in Attitudes, Practices and now a day’s focus is SBCC, which employs a more comprehensive approach.

Thus, integrating strategic communication with behaviour change approaches provides an opportunity to transform communication from a process of information delivery into a catalyst for adoption, empowerment and social transformation. In agriculture, this perspective is particularly relevant for improving farmers’ livelihoods, strengthening resilience and contributing to sustainable rural development. SBCC approaches behaviors change from multiple levels by analyzing personal, societal, and environmental factors to find the most effective tipping points for sustainable change. There are 3 strategies employed by SBCC in addressing issues and problems, viz., Behaviour Change Communication (BCC), Social Mobilization, and Advocacy (John, 2008). BCC strategies are-

- Awareness campaign
- Documentary
- Leaflet
- Posters
- Booklet

Doubling farmers’ income in such a short period is an overwhelming task for decision makers, scientists and policy makers. Doubling farmers’ income is possible through increasing total output and better price realization in market, reduction in production costs, and diversification of product, efficient post-harvest management, and value addition.

SBCC methods aim to improve advocacy or mobilization for social action, along with BCC for personal change. BCC is thus part of SBCC, while SBCC builds on BCC. SBCC is a process. This means that SBCC is interactive, researched, planned, and strategic. SBCC help to achieve individual empowerment and use strategies that influence the physical, socio-economic, and cultural environment to facilitate healthy norms and choices and remove barriers to them. In some situations, advocacy or social mobilization for policy change may support stronger and more immediate permanent change than campaigns that target individual behaviours. It also aims to change social conditions and individual behaviours. SBCC looks at a problem from multiple sides by analysing personal, societal, and environmental factors to find the most effective tipping points for sustainable change. SBCC help to achieve individual empowerment and use strategies that influence the physical, socio-economic, and cultural environment to facilitate healthy norms and choices and remove barriers to them. The SBCC module that is being introduced is largely to address communication needs at the community, family and individual levels.

Extension strategies for doubling farmers’ income

- In the remote area, through the KVKs and Line departments, intensive publicity campaigns can be carried out in all media information programmes.
- Organising interactive seminars at regional levels for doubling income.
- Brainstorming session at the official level with agriculture scientists and line department scientists.
- Organising various skill development programmes for farmers, farm women and rural youth.

- TV programmes focusing on the production of large scale crops, practices.
- YouTube videos of the various types of crops that are grown using agricultural Radio programmes about how to make a living.
- Demonstrations of improved practices or high yielding crops.

Justification

The Ministry of Agriculture and Family Welfare constituted an Inter-ministerial Committee in April, 2016 to examine issues relating to “Doubling of Farmers Income” (DFI) and recommend strategies to achieve the goal by bringing changes in behaviour of the farmers. Social and Behaviour change communication (SBCC) also known as BCC is needed to increase the knowledge and attitude of the people and thus it will act as a communication strategy to encourage the farmers. The Government has adopted several developmental programmes, schemes, reforms and policies that focus on higher incomes for the farmers. All these policies & programmes are being supported by higher budgetary allocations, creating Corpus Funds, and supplementary income transfers under PM-KISAN which will help to reach the goal of DFI. Now a day’s government is focusing on doubling farmers income by 2022 through various major interventions the “Atma Nirbhar Bharat” – Agriculture’ which includes comprehensive market reforms and creation of ‘Agricultural Infrastructure Fund (AIF)’ worth Rs. 1 lakh crore. It is necessary to build confidence among the farmers by developing various models and bring awareness among themselves through various Extension teaching methods which will give impact in the changing behaviour. So By Keeping these points in view the current study has been undertaken which aims to study the Strategic Communication for Behaviour Change and Social Impact: Assessing Farmers’ Attitudes and Practices towards Doubling Farmers’ Income. Therefore, the study was conducted with the following objectives:

Objectives

- To assess farmers’ attitudes towards Doubling Farmers’ Income.
- To identify existing practices, communication gaps and behavioural barriers affecting Doubling Farmers’ Income.

2. Methodology

The study was conducted in Assam, a state in the north-eastern region of India, comprising six agro-climatic zones, namely Upper Brahmaputra Valley, Central Brahmaputra Valley, Lower Brahmaputra Valley, North Bank Plain, Barak Valley and Hills Zone. For the present study, three agro-climatic zones—Upper Brahmaputra Valley, Central Brahmaputra Valley and Lower Brahmaputra Valley—were selected through simple random sampling. Subsequently, one district from each selected zone, namely Jorhat, Morigaon and Kamrup Rural, respectively, was selected through simple random sampling. From each selected district, one block was chosen randomly, followed by the selection of two villages from each block using simple random sampling. Thus, a total of three districts, three blocks and six villages were selected for the study. A multistage purposive-cum-simple random sampling procedure was followed for the selection of the study area and respondents. The data were collected through personal interview method and analysed with the help of appropriate statistical techniques such as frequency percentage and ‘t’ test.

For selection of the respondents, a list of farmers who are actively participating in Agriculture and allied areas was prepared in consultation with the agriculture development officer of each selected village. Forty (40) farmers were selected from each village by using simple random sampling method. Thus, Eighty (80) farmers from each district were selected for the study. Altogether Two forty (240) farmers were selected as respondents for the present study.

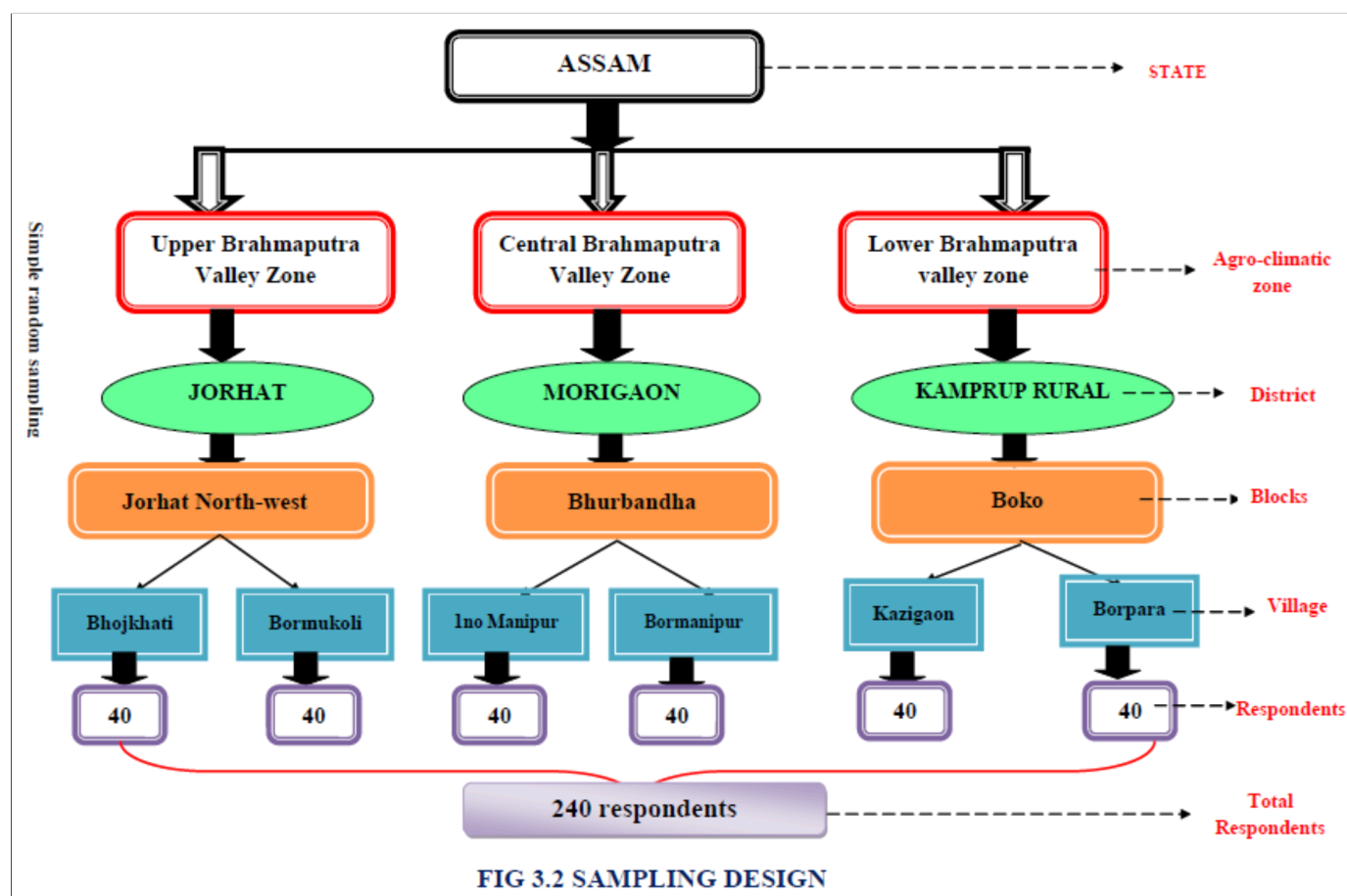


Figure 1. SAMPLING DESIGN

3. Results and discussion

3.1 Attitude towards doubling farmers' income

The favourable attitude of farmers towards doubling farmers' income is very much necessary for obtaining effective and efficient use of strategies for doubling their income which would build confidence among the farmers to take farming as a main earning source.

The data in the [fig 2](#) reveals that 44.58 per cent of the respondents had a favourable attitude towards doubling farmers' income whereas 13.33 per cent of the respondents had highly favourable attitude and 42.08 per cent of the respondents had least favourable attitude towards doubling farmers' income.

The favourable attitude of the respondents towards doubling farmers income is might be due to knowledge level of respondents is medium towards doubling farmers income and also since majority of the respondents were literate and belonged to young age group these might have influenced the respondents to have favourable attitude towards doubling farmers income.

Further findings imply that there is scope to increase the percentage of the favourable attitude of the farmers towards doubling farmer's income by motivating the farmers through various SBCC Strategies towards doubling their income. Since majority of the farmers had favourable attitude towards doubling farmers income therefore, effective use of strategies for doubling their income make the farmers affluent a to engaged in farming for increasing their income and agriculture scenario of the state.

Findings from the [Table 1](#) indicates that favourable attitude of respondents towards doubling farmers income is mostly seen in the statements provide in the interview schedule among those the most efficient and favourable statements are listed as a top 20 attitude statements from which the respondents attitude is assessed. The favourable attitude towards doubling farmers' income had given a positive image for effective use of strategies for doubling their income.

1. Gender wise distribution of attitude of farmers towards doubling farmers' income

Table 1. Top 20 Ranking of the Attitude Statements

Sl. No.	Statements	Mean Score	Rank
1	The market Linkage of the farmers with the market helps the farmer to enhance the income of farmers.	4.5504	I
2	It Increase the crop productivity without any yielding gap that cannot meet the needs of the farmers	4.233	II
3	Doubling farmer's income farmers are ready to promote adoption of newly based technologies in various field of agriculture	4.179	III
4	Doubling Farmers income has change the mind of the farmers towards farming that is practiced by both literates and illiterates	4.145	IV
5	Doubling farmers income give a positive image in farming helps in benefit of the farmers.	4.125	V

(continued on next page)

Sl. No.	Statements	Mean Score	Rank
6	Market linkage has been improved by the implementation of Doubling farmer's income that makes farmers a friendly environment.	4.020	VI
7	Farmers are privileged to Adopt sustainable technologies that leads to doubling Farmers Income	3.975	VII
8	Farmers in doubling farmers income able to take risk in improving Productivity and Production efficiency	3.962	VIII
9	The government initiatives towards Doubling farmers income is efficient for economic motivation is a great relief for the farmers	3.891	IX
10	Farmers practicing doubling farmer's income are dedicated to enhancing productivity in all agricultural subsectors in order to increase total output	3.837	X
11.	Doubling farmers encourage farmers don't adopt improved practices in order to double their preparatory efforts, boosting output while decreasing cultivation expenses	3.8333	XI
12.	Doubling farmers income can't accelerate by implementation of Pradhan Mantri Fasal Bima Yojna (PMFBY)	3.829	XII
13.	Doubling farmers Income can't be a potential strategy to make the farmers productive and reach out the needy farmers	3.754	XIII
14.	Farmers feel agriculture is not profitable occupation than any other occupation towards doubling farmers income	3.729	XIV
15	Doubling farmers income mainly focuses on increasing the crop intensity for the growth of agriculture	3.725	XV
16	DFI is critical for enhancing the farmers income through imparting skills to farmers on "on-farm production, post production practices and non-farm activities"	3.704	XVI
17	ICAR and SAUs should develop models of farming system for different types of socioeconomic and bio physical settings combining all their technologies in a package with focus on farm income is a great relief for the farmers for practicing farming.	3.7042	XVII
18	Doubling farmer's income can promote farmers' welfare, reduce agrarian distress and bring parity between income of farmers and those working in non-agricultural professions	3.7042	XVIII
19	Focus on irrigation with sufficient budget, with the aim of "Per Drop More Crop" is an initiate towards farmers to increase productivity.	3.625	XIX
20	DFI don't introduced new crop insurance scheme to mitigate risks at an affordable cost is a great stress for the farmers	3.487	XX

To assess the favourable attitude towards doubling farmers income among both male and female respondents paired 't' test was applied as a comparison of attitude between both male and female by taking

all the scores from the attitude statements and the data is presented in the Table 2.

Table 2. Comparisons of attitude score between both male and female respondents

Variables	Mean score	S.D	't' value	Sig
Knowledge of male respondents	39.26	5.036	- 0.894	0.372 NS
Knowledge of female respondents	39.81	4.489		

NS= Non significant

Thus findings reveal that there is no significance difference between attitude of both male and female respondents towards Doubling Farmers Income.

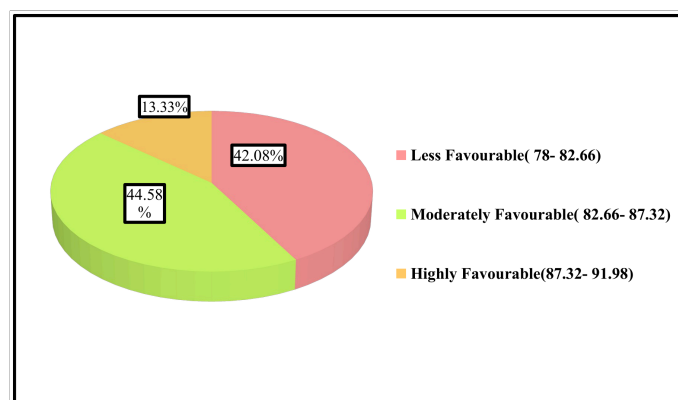


Figure 2. DISTRIBUTION OF THE RESPONDENTS ACCORDING TO THE LEVEL OF ATTITUDE TOWARDS DOUBLING FARMERS INCOME

3.1.2 Summary of attitude of farmers towards doubling farmers' income

Majority of the respondents included in the study had favourable attitude towards doubling farmers' income. The study also reveals that there is no significance difference between the attitude of both male and female respondents. Attitude among the farmers are seen to be favourable as they had existing knowledge on doubling farmers income which help them to change their attitude through various SBCC Strategies towards doubling their income. The findings implies for bridging a extension linkage with line department and Agriculture universities.

3.2 Practice of farmers on doubling farmers' income

Practice is the habits of the farming community to adopt the strategies and technologies for achieving the doubling farmers' income target. Practice on doubling farmers' income by the respondents was assessed in term of adoption of practices and using suitable technologies for farming.

The data in the fig 2 reflects that 52.69 per cent of the respondents had medium level of practice on doubling farmers' income followed

by 43.98 per cent had low level and only 3.32 per cent have high level of practice on doubling farmers income. The findings reveals that the respondents are aware of adopting organic farming and also using of sustainable technologies as result of which they had gain a medium level of practice n doubling their income. The findings also calls for conducting training related to practice on doubling farmers' income with extension workers, concern government officials and Agriculture University personnel.

3.2.1 Gender wise distribution of practice of farmers on doubling farmers' income

To assess the Practice on doubling farmers income among both male and female respondents paired 't' test was applied as a comparison of practice between both male and female by taking all the scores from the practice statements and the data is presented in the Table 4.

Table 3. Distribution of the respondents according to the mean score of practice of farmers on doubling farmers' income

Sl. No.	Statements	Mean Score
1	Practicing the Sustainable technologies for farming	1.8216
2	Ensure whether all the farmers income is supported through PM KISAN	1.6598
3	Practicing of organic farming through implementation of PKVY (Paramparagat Krishi Vikas Yojana)	1.6639
4	Practicing about diversification of product, efficient post-harvest management and value addition.	1.7054
5	Farmers are practicing cropping with increasing productivity through better seeds and better irrigation.	1.4232
6	Linkage with government policies/programmes and take advice from expert/scientist while practicing doubling farmers income	1.6349
7	Conservation agriculture practices or cost reducing technologies for increasing the income.	1.4896
8	Practicing Policy Support and Linking Farmers to Market through National Mission on 'Farmer First	1.4772
9	Use of more bio-fertilizers, vermi-compost and farmyard manure in addition to chemical fertilizers	1.5560
10	Training taken to double the farmers income and to build capacity and scope for skilling on special practices to improve economic efficiency.	1.3237
11	Farmers can take care of large investment in agriculture infrastructure such as warehousing to prevent post -harvest loss.	1.3693
12	Use of Market chain development for doubling the farmers income	1.4315
13	Product sell through Minimum support price (MSP) an government initiatives for guarantee income	1.2905
14	Practicing of value addition for doubling the farmer's income.	1.1328

Thus findings reveal that there is no significance difference between Income. practice of both male and female respondents on Doubling Farmers

Table 4. Comparisons of practice score between both male and female respondents

Variables	Mean score	S.D	't' value	Sig
Practice of male respondents	21.00	2.234	- 0.088	0.930 NS
Practice of female respondents	20.97	2.228		

NS= Non significant

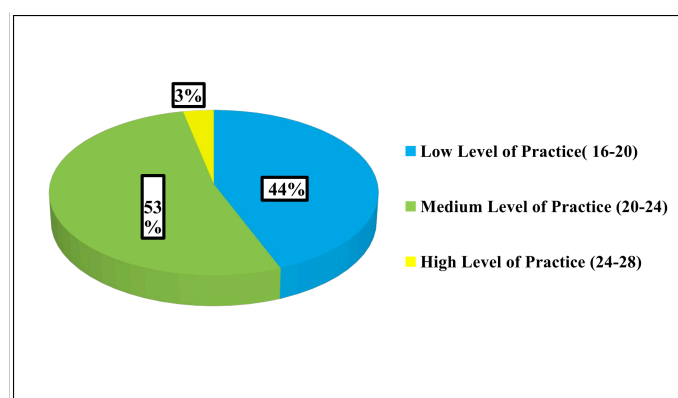


Figure 2. DISTRIBUTION OF THE RESPONDENTS ACCORDING TO LEVEL OF PRACTICE ON DOUBLING FARMERS INCOME

3.2.2 Summary of practice of farmers on doubling farmers' income

The data reflected that majority of the respondents had medium level of practice on doubling farmers income. The study also reveals that there is no significance difference between the practice of both male and female respondents. Change of practice level can be seen among

the respondents by arranging awareness and motivation programme towards Doubling Farmers Income its programmes, policies and various benefits of doubling their income. The findings also indicates that the farmers are not very aware of doubling farmers income as they continue with traditional method of farming and they don't equip with modernized technologies. From the study it reveals that there is a need to change the behaviour of the farmers towards the doubling farmers' income.

4. Conclusion: Attitude towards doubling farmers' income

Less than half (44.58%) of the respondents had a moderately favourable attitude towards Doubling Farmers Income followed by 42.08 per cent of the respondent had least favourable attitude towards doubling farmers income and only 13.33 per cent of the respondents had highly favourable attitude with a mean score of 84.62 which can depict that favourable attitude of the respondents towards doubling farmers income is might be due to knowledge level of respondents is medium towards doubling farmers income. To assess the favourable attitude towards doubling farmers income among both male and female respondents paired 't' test was applied as a comparison of attitude between both male and female by taking all the scores from the attitude statements which reveals that there is no significance difference between both male and female respondents.

2. Practice on doubling farmers' income

Half of the respondents (52.69%) of the respondents had medium level of practice on doubling farmers' income followed by 43.98 per cent had low level and only 3.32 per cent have high level of practice on doubling farmers income with a mean score of 20.97. Mean score is calculated from all the practice statement. The statement 1 mean score is 1.821, statement 2 mean score 1.659, statement 3 is 1.663, statement 4 mean score is 1.705, statement 5 mean score is 1.423, statement 6 is 1.634, statement 7 score is 1.489, statement 8 mean score is 1.477, statement 9 is 1.556, statement 10 mean score is 1.323, statement 11 is 1.369, statement 12 mean score is 1.431, statement 13 mean score is 1.290 and statement 14 mean score is 1.132. Findings further shows that there is no significance difference between practice of both male and female respondents on Doubling Farmers Income. Practices of the farmers for doubling farmers' income had given the respondents aware of adopting organic farming and also using of sustainable technologies. Changes of the practice of the farmers can be seen through intervention programme and arranging various training. Based on the findings of the present study, it can be concluded that a large percent of the respondents have moderately favourable attitude towards doubling farmers Income. So, that they need lots of awareness and motivation towards Doubling Farmers Income its programmes, policies and various benefits of doubling farmers' income. The study also reveals that majority of the respondents had medium level of practice on Doubling their Income. The findings also showed that they had very less participation in training related to Farming. In this case extension workers, concern government officials and Agriculture University personnel have duty to conduct training to double their income. It was found that the Knowledge of the respondents on Non-Farm Income generating strategies is Low as compared to other strategies for doubling farmers income. This shows that the respondents are not concerned of saving the money for future benefits nor they are involved in any other activities rather than farming.

References

- Niti Aayog. Doubling farmers income (Rationale, Strategy, Prospects and Action Plan). Policy paper No 1/2017. 2017.
- Abrar ul Haq M, Sankar JP, Akram F. The role of farmers' attitude towards their resources to alleviate rural household poverty. *Qual. Quant.* 2022;56:2133-2155.
- Ali A, Chakravarty M, Rajbongshi A, Deka M, Mazumdar H, Bhuyan S, Ali NF. Backyard poultry farming empowering women for doubling farmers' income. *J. Entomol. Zool. Stud.* 2020;8:1138-1143.
- Ananth PN, Sundaray JK, Samantaray SK. Review on Innovative Extension Approaches of Krishi Vigyan Kendra (KVK), Farm Science Centres of India. Souvenir. Extension Strategies and Challenges for Doubling Farmers' Income International Extension Congress 2018. New Horizons of Extension- Challenges and Opportunities. ICAR-CIWA, Bhubaneswar, Odisha. 2018.
- Argade S, Pailan GH, Mahapatra BK, Dutta S, Munilkumar S, Dasgupta S, Xavier KM. Impact of skill development trainings on fish farmers' knowledge and attitude: A case study from Bihar, India. *Indian J. Fish.* 2023;70(1):119-125.
- Balkrishna A, Arya V, Joshi R, Kumar A, Sharma G, Dhyani A. Doubling Farmers' Income in India: Progress, Gaps and Futuristic Approaches. *Indian J. Ecol.* 2022;49(3):1044-1050.
- Bihari BANKEY, Singh MADAN, Bishnoi R, Mishra PK. Issues, challenges and strategies for doubling the farmers' income in India-A review. *Indian J. Agril. Sci.* 2020;89(8):1219-1224.
- Boora S, Kaur B, Tyagi R. Attitude of Farmers toward Intercropping in Haryana. *Indian J. Extn. Edn.* 2022;58(4):91-95.
- Boppana J, Patel JB, Shafi M. Relationship between profile of the farmers and their attitude towards Krishi Mahotsav. *Gujarat J. Extn. Edn.* 2020;31(2):147-151.
- Bora M, Deka M, Bharali M, Bhuyan S, Chakravarty M, Ali A, Datta HS. Attitude and economic motivation of farmers towards farming for doubling farm income. *J. Comm. Mobiliz. Sust. Develop.* 2018;13(3):426-430.
- Changela P, Devi G. Doubling farmers' income options and challenges in Gujarat: a review. *Guj. J. Extn. Edn. Special Issue.* 2017:210-217.
- Chatterjee S, Mukherjee D. Strategies for doubling farmers' income through horticulture. *Agric. Food: e-Newsl.* 2019;1:5-7.
- Chovatia JV, Kalsariya BN, Odedra RK. Attitude of Cotton Growers towards Drip Irrigation System of Saurashtra Region. *Guj. J. Extn. Edn.* 2018;1:38-40.
- Clark CJ, Spencer RA, Shrestha B, Ferguson G, Oakes JM, Gupta J. Evaluating a multicomponent social behaviour change communication strategy to reduce intimate partner violence among married couples: study protocol for a cluster randomized trial in Nepal. *BMC Public Health.* 2017;17:1-14.
- Davis R, Campbell R, Hildon Z, Hobbs L, Michie S. Theories of behaviour and behaviour change across the social and behavioural sciences: a scoping review. *Health Psychol. Rev.* 2015;9(3):323-344.
- Do MP, Kincaid DL. Impact of an entertainment education television drama on health knowledge and behaviour in Bangladesh: An application of propensity score matching. *J. Health Comm.* 2006;11(3):301-325.
- Frost H, Campbell P, Maxwell M, O'Carroll RE, Dombrowski SU, Williams B, Pollock A. Effectiveness of motivational interviewing on adult behaviour change in health and social care settings: a systematic review of reviews. *PloS One.* 2018;13(10):e0204890.
- Gurjar RS, Badodiya SK, Verma J, Sharma A. Entrepreneurial Behaviour of Bee Keeping Farmers and Doubling Their Income. *Int. Arch. App. Sci. Technol.* 2020;11(1):62-69.
- Hinyard LJ, Kreuter MW. Using narrative communication as a tool for health behavior change: a conceptual, theoretical, and empirical overview. *Health Edn. Behav.* 2007;34(5):777-792.
- Huria A, Angchok D, Tamchos T, Chaurasi OP. A scale to measure the attitude of farmers towards organic farming in Ladakh. *Indian Res. J. Extn. Edn.* 2023;23(3):98-103.
- John G. Social and behaviour change communication (SBCC) strategies and the fight against drug abuse in calabar south local government area, cross river state. *Int. J. Adv. Mass Comm. J.* 2020.
- Kamani KC, Ghodasara YR, Parsania PS. Role of ict in extension strategies to facilitate doubling of farmers' income. *Guj. J. Extn. Edn. Special Issue.* 2018:1-7.
- Khan ME, Bhavnagar I, Hazra A, Kumar M. Situation analysis of behaviour change communication activities in Bihar: A step towards developing a comprehensive BCC strategy. New Delhi: Population Council; 2012.
- Koenker H, Keating J. Strategic roles for behaviour change communication in a changing malaria landscape. *Malaria J.* 2016;13(1).
- Kumar R, Kumar S, Yashavanth BS, Meena PC. Natural Farming practices in India: Its adoption and impact on crop yield and farmers' income. *Indian J. Agric. Econ.* 2019;74:420-432.
- Maheshwari M, Patel MR, Nayak JJ. Attitude of students towards agricultural education. *Small.* 2018;1(2):13.
- Mandal S, Burman D, Mandal UK, Lama TD, Maji B, Sharma PC. Challenges, options and strategies for doubling farmers' income in West Bengal-reflections from coastal region. *Agril. Econ. Res. Rev.* 2017;30:89-100.
- Michie S, Whittington C, Hamoudi Z, Zarnani F, Tober G, West R. Identification of behaviour change techniques to reduce excessive alcohol consumption. *Addiction.* 2012;107(8):1431-1440.

29. Mistri B, Londhe BM. Sustainable Farming Practices in Indian Agriculture. J.N.X. 2020;339-343.
30. Morrison LG. Theory-based strategies for enhancing the impact and usage of digital health behaviour change interventions: a review. Digital Health. 2015;0(0):1-10.
31. Neerja S, Arora RK, Sanjay K. Attitude of farmers towards KVK training programmes and their impact. Agric. Update. 2013;8(1/2):31-34.
32. Ngigi S, Busolo DN. Behaviour change communication in health promotion: Appropriate practices and promising approaches. Int. J. Innov. Res. Develop. 2018;7(9):84-93.
33. Ngwu UI. The practice of open defecation in rural communities in nigeria: a call for social and behaviour change communication intervention. Int. J. Comm. Res. 2017;7(3).
34. Onima VT, Chauhan NB, Gulkari KD. Attitude of Farmers towards Mixed Farming. Indian J. Extn. Edn. 2017;53(3):94-97.
35. Padhiary GG. Doubling of Farmers' Income by 2022: Scope and Strategy. Just Agric. Multidisc. e-newsletter. 2021;1(6):1-6.
36. Ponnusamy K, Devi MK. Impact of integrated farming system approach on doubling farmers' income. Agric. Econ. Res. Rev. 2017;30:233-240.
37. Rahman A, Leppard M, Rashid S, Jahan N, Nasreen HE. Community perceptions of behaviour change communication interventions of the maternal neonatal and child health programme in rural Bangladesh: an exploratory study. BMC Health Ser. Res. 2016;16(1):1-13.
38. Rani RN, Spandana B, Kamalaja T, Kodali S, Jyothi TA. Assessment of demographic factors on knowledge, attitude and practice levels of farm families towards crop diversification. Age. 2023;26(38):71.
39. Rathod RB, Khodifad PB, Dhola AB, Patel AS. Knowledge and attitude of farmers about doubling farm income strategies. J. Pharmacog. Phytochem. 2021;10(1S):569-572.
40. Ministry of Agriculture & Farmers Welfare. Report of the Committee on Doubling Farmers' Income. 2017.
41. Sabharwal K, Dahiya R, Kundu P, Kaushik S. Contribution towards doubling of farmers' income: training impact of milk and milk products. Agro Bio Res. Publ. 2019;31(1):1-5.
42. Sarial AK. Doubling farmers' income: a model for hilly and mountainous region. Himachal J. Agril. Res. 2016;42(2):101-114.
43. Satyasai KJS, Bharti S. Doubling farmers' income: Way forward. Rural Pulse. 2016;14:1-4.
44. Saxena R, Singh NP, Balaji SJ, Ahuja U, Kumar R, Joshi D. Doubling farmers' income in India by 2022-23: Sources of growth and approaches. Agril. Econ. Res. Rev. 2017;30:265-277.
45. Sendhil R, Balaji SJ, Ramasundaram P, Kumar A, Singh S, Chatrath R, Singh GP. Doubling Farmers Income by 2022: Trends, Challenges, Pathway and Strategies. Research Bulletin No: 40, ICAR-Indian Institute of Wheat and Barley Research, Karnal. 2018:1-54.
46. Sendhil R, Kumar A, Singh S, Chatrath R, Singh GP. Framework for Doubling the Income of Wheat Producers' by 2022: Trends, Pathway and Drivers. Indian J. Econ. Develop. 2017;13(2a):1-8.
47. Sharanappa S, Nabooji A, Yusufali AN. Doubling the income through integrated farming system approaches in Karnataka. The Pharma. Innov. J. 2021;SP-10(12):2041-2046.
48. Shireesha K, Satyagopal PV, Lakshmi T, Ravindraredy B, Prasad SV. Attitude of youth towards farming-A critical analysis. Adv. Life Sci. 2016;5(18):7935-7940.
49. Shukla AP, Patel MR, Chauhan NB. Attitude of the farmers towards tissue culture raised banana technology. age. 2018;66:66-00.
50. Singh GP, Sendhil R, Kumar A, Singh S, Tripathi SC. Doubling farmers' income by 2022: pathway and strategies for wheat producers. Indian Farm. 2018;68(1).
51. Singh KM, Singh P. Doubling farmers' income: An action research initiative in Bihar (India). MPRA Paper No. 96702. 2017.
52. Singh N, Leua AK. Adaptation and climate change: Challenges for doubling the farmers income. Indian J. Econ. Develop. 2017;13(2):437-442.
53. Singh P, Singh KM, Shahi Br. Doubling Income of Cauliflower Seed Producer Farmers of Vaishali District through Pollination Service by *Apis mellifera* Colonies. Int. J. Curr. Microbiol. App. Sci. 2018;7:5242-5249.
54. Singh RK, Dohaery RK, Meena NR, Shekhar C. Doubling farmer's income: A case study constraints faced by the farmers in adoption of farming system approach in Terai zone of Uttar Pradesh. Young. 2022;35(94):23-25.
55. Snyder LB. Health communication campaigns and their impact on behavior. J. Nutr. Edn. Behavior. 2007;39(2):S32-S40.
56. Srikala PV. Doubling Farmers' Income by 2022. Int. J. Mngt. (IJM). 2020;11(1):9-14.
57. Vishandass A, Thakwani N. Atmanirbhar in Agriculture-Doubling farmers' income. Indian Institute of Public Administration. 2019:206-210.
58. Wallen KE, Daut E. The challenge and opportunity of behaviour change methods and frameworks to reduce demand for illegal wildlife. Nature Conserv. 2018;26:55-75.

WEB BASED REFERENCE
<https://egyankosh.ac.in/bitstream/123456789/78615/1/Unit-16.pdf>.

60. <https://icar.org.in/sites/default/files/inline-files/Dobling-farmers-income.pdf>.
61. Press Information Bureau. Press Release. pib.gov.in. 2023.
62. Department of Agriculture and Farmers Welfare. DFI Volume 13. farmer.gov.in.
63. Vikaspedia. Policy paper on doubling farmers income. vikaspedia.in.

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