Seed of an idea: *Mann Ki Baat* (Inner thoughts) programme and its perceived social influence on millets farming

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ABSTRACT

The declining area and production of millets needed a national-level social influencer, and Mann Ki Baat was an inspiring initiative hosted by the Hon'ble Prime Minister. The present study tried to assess the perception of millet farmers, as to how social influencing event, such as Mann Ki Baat, has impacted millets farming context. The study was carried out in 68 districts belonging to 28 states and Union Territories with a participation of 1,236 millet farmers, and professionals from 68 Krishi Vigyan Kendras (KVKs). The results indicated that the ~88% of KVKs could undertake the follow-up activity on the Mann Ki Baat, and for attending a few episodes at KVK campuses, 60% of the farmers respondents travelled more than 15 KM. Among the millet farmers, 53% have listened to five Mann Ki Baat episodes, whereas 9% of the farmers have listened to more than 30 episodes (for general issues, going beyond agriculture-related episodes). This reveals that Mann Ki Baat, is no longer an urban-oriented programme, but has directly reached out to the marginal millet farmers. Mass media and social media played a major role in publicizing the event among millet farmers and consumers, while KVKs provided knowledge support to millet farmers during and after the Mann Ki Baat episodes. About 20% of the farmers either formed or joined the Interest groups on millets after listening to the Mann Ki Baat. More than 45% of the farmers believed that they got at least one additional idea and/or practice about millet farming due to this event. A considerable number of respondents either adopted or have been sensitized to what they were already doing, and further having millets in their diet after hearing the Mann Ki Baat episodes. The episodes had substantial influence on the perception of millet growers and consumers, which has strengthened further process of farmers' adoption of improved varieties of millets and strengthened the environment on agri-entrepreneurship. The lessons learned from the study may help further to promote millet farming in accordance with changing agricultural scenarios locally and globally.

Keywords: Indicators, International year of millets, KVKs, *Mann Ki Baat*, Millets farming, Social influence, Socio-economic analysis

The social influence of eminent personalities can influence the perceptions and attitudes of small farmers towards millet farming. Several studies such as Aram (2019), Mellon-Bedi et al. (2020) and Varshney et al. (2022), explored the role of social influence on various aspects of millet farming, including consumption behaviour, farming practices and knowledge exchange. The declining area and production of millets can be increased by creating awareness programs for its value including health, economic and trade, environmental, ecological and sociocultural among the farmers and other stakeholders (Sangappa et al. 2023). Mann Ki Baat is one such Indian radio programme hosted

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by the Hon'ble Prime Minister of India to address the people (rural and urban) of the nation on All India Radio, DD National and DD News. The programme name Mann Ki Baat has been used frequently in this paper, which carry the meaning inner thoughts literally. During his address on the 97th edition of Mann Ki Baat (29th January 2023), he emphasized a special focus on millet farming, value added products and importance of FPOs in promoting the millets. The PM said that people are now making millets an important ingredient of their food and the major impact of this change is now visible. On one hand, this has made millet growers happier as these farmers traditionally grow millets in their fields, on the other hand, Farmer Producer Organisations (FPOs) and entrepreneurs have now speeded up efforts to bring millets to market and make them available for the common people. Further PM highlighted the examples of ICAR-Indian Institute of Millet Research (Hyderabad) promoted millet based FPOs, viz. Aland Bhootai FPO from Kalaburgi, Karnataka and *Hulsoor Mahila Kisan* Millet FPO from Bidar, Karnataka and their marketing strategies in delivering their value-added products to consumers across the country. Thus, the message in *Mann Ki Baat* could help in reaching out the people and creating awareness among them on millet related technologies, markets, value added products and processing aspects to diverse stakeholders.

MATERIALS AND METHODS

The social influence of talks on farming methods is a difficult indicator to capture. However, we tried to develop a conceptual framework and a research methodology to at least understand the perception of farmers and efforts being made by the KVKs for such farmers. Given the grassroots presence of KVKs and their reach to the actual participants of Mann Ki Baat, we received the data from them for better learning on the millet aspects and draw some inferences. All the KVKs and the farmers attending the Mann Ki Baat were treated as the universe for this study. The 11 Agricultural Technology Application Research Institutes (ATARI) spread across the country were selected for bringing universality of the findings. From them, a total of 68 KVKs were selected purposely based on their engagement on millets and participation in Mann Ki Baat episodes related activities. Another criterion for selection of these KVKs was that such KVKs should have either operational or potential millet farming areas. Data were collected from 68 districts involving 1,236 farmers who have participated in the Mann Ki Baat, either in KVK campus or at their own places. Two sets of questionnaires were developed, pilot tested, and transformed into Google Forms. One questionnaire aimed at collecting the general data pertaining to KVKs activities, their level of facilitation, how their programs got influenced by the Mann Ki Baat. Whereas, the second set of questionnaire was applied in collecting the data from the millets farmers and consumers. The contents required for developing the questionnaire was taken from local print media, news items available in public domain and various proceedings as part of millet programmes being run throughout the country.

The professional scientists working in selected KVKs were engaged in collecting the data (in local language) using hard copy of questionnaires. This has latter been uploaded with responses in Google Forms. A total of 1,236 farmers of both male and female gender, belonging to various age group, social category, education, income group, farm size holding, cultivating, and consuming millets participated in the survey. After collecting the data, these were entered into spread sheets and characterized with different variables. Incomplete questionnaire and outlier observation were discarded before data were analysed. The inference of study was drawn using descriptive statistics including frequency, percentage and key text.

RESULTS AND DISCUSSION

Keeping in view the objectives of the study, the results are discussed under the following heads. First two sections

highlight the study results of the questionnaires served to 68 KVKs. Rest of the sections deal with the results related to survey organized with 1,236 millet farmers.

Capturing the extent of facilitation by KVKs: The results reveal that the selected 68 KVKs have actively engaged in either organizing directly or mobilizing indirectly the Mann Ki Baat episodes to the extent of 989 times in various parts. Out of 38,210 farmers facilitated for this purpose, 24,181 were male and 14,029 were female (Table 1). This indicates that the Mann Ki Baat, in general, seemed to be popular among the women farmers also. For on campus events, 47% of the respondents travelled more than 20 KM to reach the KVK campus to listen and access the information and inputs (Fig 1). A little more than 13% have travelled 15 to 20 KM to reach the KVK campus. The distribution of the respondents based on the farm size revealed that more than 58% were marginal farmers and 26% were smallholder farmers. It could be concluded that more number of small and marginal farmers actively participated in the Mann Ki Baat events than the large commercial farmers (Fig 2).

Among the respondents, 58.47% were marginal farmers, and 26.43% were smallholder farmers. This is also due to the fact that, the respondents for this study are millet farmers and the millet farming is essentially a small and marginal farming proposition. It is obvious from the results that social media played a major role in disseminating the word about *Mann Ki Baat* programme (Fig 3). Television and radio were the major source of information among the mass media wherein 60.38 and 54.72% of the farmers got the information. Most importantly KVKs banked on the

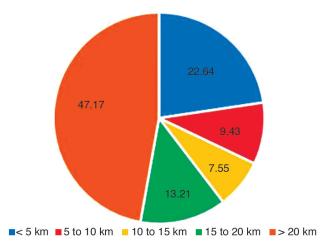


Fig 1 Distance travelled by farmers to reach KVKs in order to attend *Mann Ki Baat*.

Table 1 Events on Mann Ki Baat organized by the KVKs

Nature of event	Number of	Participants (No.)		
	event	Male	Female	Total
On Campus	246	12077	5753	17830
Off Campus	743	12104	8276	20380
Total	989	24181	14029	38210

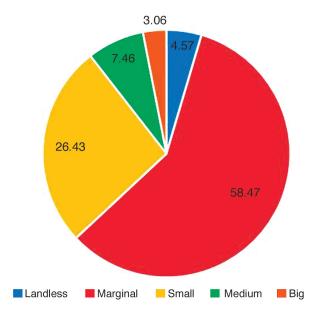


Fig 2 Categorization of millet farmers attended the *Mann Ki Baat* events, based on farm size.

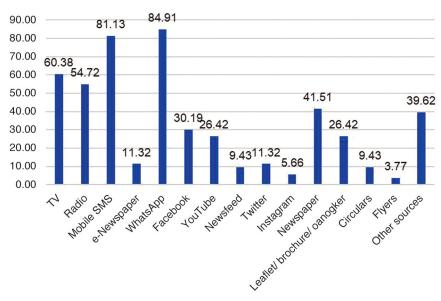


Fig 3 Source of publicity used by KVKs to generate awareness about Mann Ki Baat.

SMS and WhatsApp services to publicize the events among about 81–84% of the farmers. Further, it was recorded that the publicity material released by Government of India was mostly used with additional information provided in the local language while publicizing the event. We made an attempt to analyze the activities undertaken by the KVKs while facilitating the *Mann Ki Baat* episodes. It was learned that 90.57% of the KVKs provided the demand driven literature related to the millets in support of the motivated queries from the participants of *Mann Ki Baat* (Fig 4). Availability of extension literature at KVKs, especially in local languages, enabled the KVKs to readily distribute the literature as a follow-up of the event. More than 88% of the KVKs indicated that they did undertake the follow-up

activity after the *Mann Ki Baat* programme. Especially on the topics raised in the episodes, KVKs have also tweaked their activities in order to serve the farmers better. About 49% of the KVKs have started documenting the success stories as how *Mann Ki Baat*, among many other activities, has motivated the farmers to undertake appropriate millet farming in their farms.

In relation to millet farming and consumption, we categorized queries raised by farmers and addressed by the KVKs. The key words related to the queries and answers found from the content analysis are as follows: (i) activities of FPOs, (ii) agro techniques for millet farming, (iii) area specific variety of pearl millet, (iv) availability of seeds, (v) best nutrition supplement for infants, (vi) climate change mitigation practices and technologies, (vii) components of natural farming for millets, (viii) different recipes of millets, (ix) drought tolerant *Ragi* varieties, (x) high yielding *Ragi* varieties, (xi) millet cultivation practices, (xii) millets in human health improvement, (xiii) Nutricereals, (xiv) nutrient management in millets, (xv) seed treatment, (xvii) nutritional importance of millets, (xviii) post-

harvest management of millets, (xviii) processing and marketing of millets, (xix) value addition in millet, (xx) suitable millet crops and availability of its seeds, (xxi) suitable variety of finger millet, etc.

We also tried to analyse as what kind of literature was provided to the Mann Ki Baat participants as a followup of the event. Some of the titles of the literature provided in relation to millet farming include; benefit of the millet made recipes and value addition of millets, components of natural farming, composting technology, conservation agriculture, cultivation of Ragi, farmers producer organization - FPO, importance of millets, latest varieties of millets, management practices in millet, millets production under natural farming, package of practices on millets cultivation, processing and

value addition of millets etc. Some of the new programmes initiated on the millet farming after the *Mann Ki Baat* include; area extension under millet crops, crop cafeteria of *Shree Anna*, millet seed production through farmers and FPOs participation, millets production under natural farming, mixed cropping for sustainable land management through natural farming, nutri-cereals *Shree Anna*, processing and value-addition of millets, promotion of natural farming, rural youth training on value addition in millets, sequence cropping with millets and pulses, value-addition of millet products etc. In addition, the KVKs have also documented few success stories on seed production of finger millet (biofortified varieties), FPOs, The *Hulsoor Mahila Kisan* Millets Producer Company Ltd.

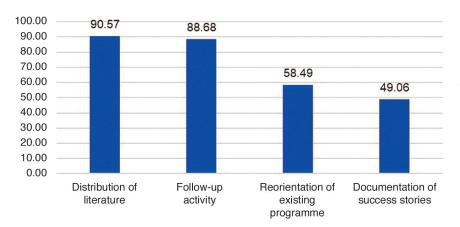


Fig 4 Follow-up activities undertaken by KVKs during and after the Mann Ki Baat events.

Socio-economic profile of millet farmers participated in Mann Ki Baat: It was observed that out of total participating farmers in Mann Ki Baat, 62.38% were of middle aged (36-55 years) and 19.90% young. About 83% were male while 16% were female farmers. A considerable percent (36%) of the millet farmers attending Mann Ki Baat belonged to schedule caste and 25% belonged to schedule tribes. The equal distribution of general category and scheduled caste farmers among the Mann Ki Baat events indicates that the programs has cut across the social barriers, and farmers enthusiastically participated in the events. Interestingly, 6.88% farmers, with no education, took part in these events. This also indicates that the social influencing does work irrespective of their education level. The income levels do not have any influence in their participation or otherwise in the events. Over 58% of the farmers were above the poverty

line. Majority of the millet farmers attending *Mann Ki Baat* episodes had medium sized family with 5–7 members in each.

Results revealed that, 80% of the farmers have more than three sources of income, even though the extent of income from each source was not that significant (Fig 5). Most of the millet farmers banked on allied activities such as poultry, sheep goat farming, piggery, apiary, while working as farm labourers in certain cases (Fig 5). About 27% of the respondents had a meagre annual income of less than one lakhs, whereas 37% of them indicated that they earn around one to two lakhs annually (Fig 6). More than 74% of the millet farmers that attended Mann Ki Baat were found to be marginal, whereas 16% were small farmers. More than 49% of the respondents indicated that they participated in Mann Ki Baat episodes atleast once in the KVK campus. For this 63% of the farmers respondents travelled more than 15 KM. Among the millet farmers who responded to the survey, 53% have listened to less than five Mann Ki Baat episodes, whereas there were 9% of the farmers who listened to more than 30 episodes (Fig 7). This reveals that Mann Ki Baat, can no longer be an urban oriented programme, but has directly reached out to the marginal millet farmers. As it goes without saying, the social influence activities would have maximum impacts when farmers discuss in group at the end of each intervention. More than 81% of the respondents stated that they

preferred listening to the *Mann Ki Baat* in a group and at the end of the episode, listened to the translation and discussed about the relevance of the topics to their local context.

Perceived changes in the practices/concepts on millet farming: An attempt was made to capture the extent of social influence on the practices and concepts of millet farming, as perceived by the respondents. The social influence might be due to a combination of sources of information that reinforcement of what listened to during the Mann Ki Baat episodes. Most of the farmers (89%) opined that they got the supporting literature from the KVKs. Similarly, 17% of support information was received from ATMA, whereas 26% of the farmers received the information through WhatsApp (Fig 8). Similarly, for the consumers of millet products KVKs remain as credible source of information as 86% of the respondents perceived that they got support literature

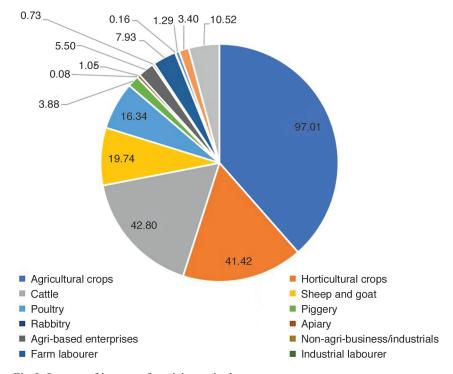


Fig 5 Sources of income of participants in the survey.

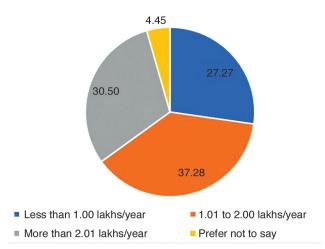


Fig 6 Categorization of respondents based on annual income.

from KVKs system. Mass media (TV and Radio) and social media (WhatsApp and YouTube) remained crucial sources of information.

Perceived impacts of Mann Ki Baat in millet farming: We investigated what follow-up activities were undertaken as a result of Mann Ki Baat, and we were aware that the factorial contribution of other sources can not be ignored. Since we try to put this in the context of Mann Ki Baat episode, we asked the farmers to provide their replies as what specific activities were undertaken because of Mann Ki Baat episodes. About 20% of the farmers either formed or joined the Interest groups on millets after listening to the Mann Ki Baat (Fig 9). More than 45% of the farmers believed

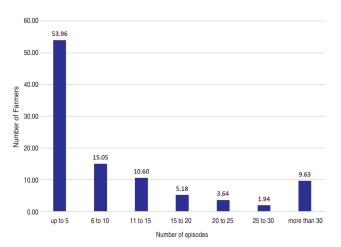


Fig 7 Number of episodes of *Mann Ki Baat* attended by the respondents.

that they got atleast one additional idea/practice about the millet farming due to this event. As a result, they opined that the way perceived about the cultivation of millets got changed. Based on the additional information received after the events, around 80% of the farmers wanted to test new millet species, varieties and methods of millet cultivation. The re-enforcement also came from participation in the field day, exposure visit and participation in the farmers day activities. Farmers, both as producers and consumers, opined that there is substantial change in the understanding of the health benefits of the millet consumption, as the message directly came from the Hon'ble Prime Minister followed

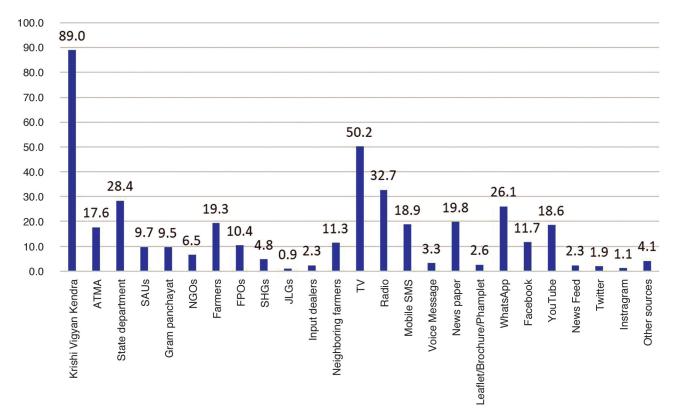


Fig 8 Source of information to farmers on millets as a follow-up after Mann Ki Baat (n=1236).

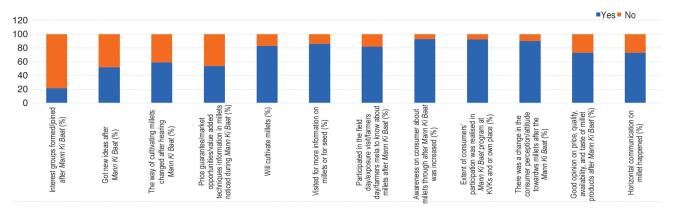


Fig 9 Perceived impact of Mann Ki Baat on millets farming.

by the group discussions held with others.

When a qualitative question was asked to the millet farmers, if they considered including the millets in their daily diet, 30% indicated that they started including the millets on regular basis, whereas 60% replied stating that occasionally they started consuming the millet products. The extent of shift to millet consumption in near future was also studied, more than 70% of the farmers hoped that they would either partially or fully shift to the millet consumption in coming years, which is a welcome sign (Fig 10, 11).

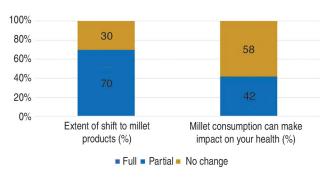


Fig 10 Impact of Mann Ki Baat on consumption perception.

it high nutritive value and demand; biofortified variety of pearl millet; change of cultivating millets in *kharif* season alone to *kharif* and *rabi* season; varietal choice that fits into sequence cropping; commercial cultivation of millets in non-traditional areas; increased consumer demand; millet farming under natural farming; expanding area under millet; partial shifting in cultivation of millets and value added products; use and promotion of bio-fortified variety of pearl millet; Government procurement mechanism (Uttarakhand government has already procured finger millet from farmers last year); and favourable markets in coming years with better market prices.

Suggestions to improve the millet farming in India: Farmers also provided feedback to improve the millet farming in India, inspired by the Hon'ble Prime Ministers talk. Some of the suggestions to improve the millet farming in India, as given by farmers included; large scale adoption of millets, based on the suitability of the millets to their

Types of change expected in millets cultivation after hearing Mann Ki Baat: A synthesis of open-ended answers as what changes they expect in future, or they are already experiencing is done in this section. The key words and the concepts as indicated by the respondent farmers were observed as: adoption of nursery; increased adoption of improved millet varieties; adoption of line sowing; adoption of line transplanting with intercropping of pigeon pea; adoption of millet crops like Ragi and Kodo millet; adoption of millets in food habit; increase in bajra area because of

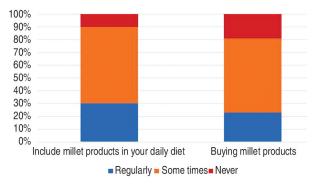


Fig 11 Impact of Mann Ki Baat on consumption perception.

respective areas; adopting modern technology for millet cultivation; area specific package of practices; Minimum Support Price (MSP) and market assurance; availability of quality seeds of small millets from the Government organizations; availability of hybrid millets cultivars (maximizing the yield); availability of primary processing machinery at block level; collection centre at village level; organic millets; direct procurement; promoting millets through Public Distribution System (PDS); promotion of bio-fortified variety of pearl millet and also promote other high yielding millet crop like finger millet; replacement of low yielding varieties with high yielding varieties; skilling in value-addition of millets; and upscaling the awareness campaigns regarding health benefits of millets etc.

Conclusion and lessons learned: The present study tried to provide few insights, as how social influencing event, such as Mann Ki Baat, has exhibited positive impact of millets farming. It was learned that farmers believed

that they got at least one additional idea and or practice about the millet farming due to the Mann Ki Baat event. An appreciable extent of change in perception on either strengthening to already previously adopted millet practices, or adopting the millets in near future by the farmers, was noticed. Additionally, as consumers, responses of farmers were citable on how their diet can be influenced after hearing the Mann Ki Baat episode(s). Therefore, Mann Ki Baat episodes have brought awareness among farmers in seeking information and new technologies on agriculture and allied activities including agri-based enterprises. In order to strengthen the existing practices and in further making millet production system viable and resilient, farmers suggested several technological, ecological, policy, market and institutional points which may help the policy planners. The present study is only an indicative one to provide preliminary assessment of perception of millet farmers about the Mann Ki Baat. There is a need for an in-depth study capturing the quantitative indicators, and to assess the factorial contribution of the Mann Ki Baat on the farm level impacts.

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Ethical statement: Respondents gave their informed consent for inclusion before they participated in the study. Informed consent was obtained from respondents for information published in this article.

REFERENCES

- A Aram. 2019. Conservation of millets: the role of community leaders in Kolli Hills, South India. *Indian Journal of Traditional Knowledge* (IJTK) **19**(1): 101–10. http://op.niscpr.res.in/index.php/IJTK/article/viewFile/30847/465477380
- Mellon-Bedi S, Descheemaeker K, Hundie-Kotu B, Frimpong S and Groot J C J. 2020. Motivational factors influencing farming practices in northern Ghana. NJAS-Wageningen. *Journal of Life Sciences* **92**: 100326. Available at https://www.sciencedirect.com/science/article/pii/S1573521418301404
- Sangappa D Rafi and K Srinivasa Babu. 2023. A Study on areaproduction-productivity of minor millets in India. *Biological Forum—An International Journal* 15(1): 275–80.
- Varshney D, Mishra A K, Joshi P K and Roy D. 2022. Social networks, heterogeneity, and adoption of technologies: *Evidence from India. Food Policy* **112**: 102360. https://www.sciencedirect.com/science/article/abs/pii/S0306919222001294