

# Using Formative Research to Inform a BCC Strategy to Increase Food Security and Dietary Diversity Through a Kitchen Gardens Project in Low-Income Rural Communities

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## Research Article

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# Abstract

## Background

Adequate nutrition is a public health priority, particularly in low-income rural communities where there is a high prevalence of malnutrition and stunting. Baluchistan is an arid desert and mountainous Province with the worst health indicators in Pakistan. The objective of this study was to identify current knowledge, attitudes and practices of vulnerable women with young children residing in remote areas of Balochistan and assess their information needs to guide the development of a BCC nutrition strategy materials and activities to support a Kitchen Gardens Project.

## Methods

The needs assessment incorporated formative research via eight focus group discussions with demand and supply-side program beneficiaries ( $n = 124$ ) to assess current nutrition knowledge, attitudes and beliefs toward kitchen gardens and proposed nutrition resources. Semi-structured interviews ( $n = 16$ ) were also conducted with key stakeholders. A literature review supported the development of discussion agenda based on predominant behavioural theories. Data analysis was conducted with NVivo qualitative software coupled with grounded theory with triangulation of findings

## Results

Opportunities categories for BCC identified more effective nutrition education, incentives of improved income and livelihoods from kitchen gardens, women's empowerment and gender equality. Challenges included traditional cultural practices, entrenched food preparation behaviours, environmental and infrastructural constraints.

## Conclusions

Lessons learned highlight the benefits of integrating a rapid assessment formative research method with a literature review including behavioural theories for BCC resource development for nutrition programs in culturally conservative, insecure and resource constrained settings.

## Introduction

WHO estimates that globally, 2 million children under 5 years of age are wasted, 17 million are severely wasted, and 155 million are stunted, with around 45% of deaths among children under 5 years of age linked to undernutrition, which mostly occurs in low- and middle-income (LMICs) countries<sup>2</sup>. Child stunting and malnutrition is also associated with lower dietary diversity with food insecurity and poor household food choices contributing to the lack in meeting children's nutrient requirements<sup>1,2</sup>.

Additionally, malnutrition is seen to predominantly occur in regions where there is limited access to high protein foods, poor vegetation cover, and a proxy of rainfall or drought<sup>3</sup>. Socioeconomic determinants also play a significant role in food insecurity and diversity of food choices, which lead to childhood and maternal malnutrition<sup>4</sup>.

Baluchistan is an arid and remote Province situated in the South West of Pakistan. The Province covers around 44% of the total land mass of Pakistan, making it the largest of the four Provinces in the region. Health and nutrition are a major problem in Baluchistan which has the worst health indicators of all other Provinces in Pakistan. Many districts in Baluchistan are food insecure with women and children being most affected by food insecurity and malnutrition. As a result, the Province has the highest prevalence of malnutrition, with a globally critical level of stunting of 47% in children under five years of age<sup>5</sup>.

There are multiple determinants of stunting and malnutrition that pose challenges toward improved nutrition in Pakistan. Recommendations on strategies to improve nutrition outcomes include a greater focus on poverty alleviation, improvement of mother's health literacy, including community-based education and targeted nutritional interventions, and accessibility to health care facilities. Furthermore, behavioural interventions are seen as being much needed in the Baluchistan context. This includes appropriate and culturally sensitive nutrition education materials which address the currently limited access to nutrition information in geographically isolated areas, particularly with most vulnerable groups<sup>6</sup>.

Given these factors, there is a considerable need for formulating best-practice, behaviour change communication (BCC) programs, tools and resources to improve nutritional outcomes and health seeking behaviours in the Province<sup>7</sup>. However, the nature and extent of BCC activities is uncertain due to the current lack of understanding of the cultural dynamics that may affect dietary attitudes, behaviours and practices in these areas. To support greater integration and institutionalising of more strategic, evidence-based BCC approaches a Kitchen Garden Project (KGP) was established to add value to the efforts of inter-sectoral integration of donor programs aiming to achieve improved nutrition outcomes. The Baluchistan Nutrition Project for Mothers and Children is funded through the Australian Government under the World Bank's Multi Donor Trust Fund for Nutrition. Project components are designed to address general malnutrition in women and children, micronutrient malnutrition, BCC and strengthening of institutional capacity. The BCC component was involved with assessing needs for the development and implementation of best practice KGP messages and a set of basic but innovative nutrition communication materials and resources to improve dietary outcomes. Resources for consideration included a training package to improve family dietary and child feeding practices of mothers with infants and a review of other BCC materials which could support greater participation in the KGP for improved nutrition, to be implemented through a Pilot Project.

## Methods

The formative research method used for the development of the BCC Pilot Project Plan comprised of Rapid Assessment and Response (RAR) approach. RAR has been found to be a cost-effective, pragmatic method of public health and social issues research allowing for rapid collection of program intelligence to support the development of BCC plans<sup>8,9,10</sup>. The application of RAR was of particular importance in the resource constrained and insecure settings of Baluchistan with the fieldwork needing to be conducted in a short time period, while ensuring adequate levels of security for field teams. Despite the challenges, a best practice approach to designing effective behavioural change interventions was embarked upon, including an assessment of participants' health behaviours and examination of the type of BCC resources and actions needed, with the objective of tailoring the interventions to best meet participant needs<sup>11</sup>.

The RAR method included academically robust, qualitative approaches, including: semi-structured interviews (SSIs), Focus Group Discussions (FGDs), observational research, and case study approaches and narratives, which are seen to have generally been underutilised in public health program research.<sup>12</sup> These qualitative methodological approaches to data collection were seen as potentially powerful tools for understanding the culturally-specific influences regarding food, dietary practices and nutrition education challenges in Baluchistan<sup>13</sup>.

The first step of the study involved an audit of existing nutrition resources in the Province with the intention of pretesting key resources as a component of the formative research. Next, was completion of a literature review to provide context for the program. International and national literature was sourced using a rapid review procedure in line with WHO recommendations for swift knowledge generation for priority health issues in resource limited settings<sup>14</sup>. A broad number of online databases were utilised as well as grey literature and internal reports sourced from Provincial stakeholders. Predominant behavioural theories applicable to the study were also identified with key variables incorporated into the program logic framework objectives, SSI and FGD agenda. Behavioural theories most relevant to the nutrition project included Health Belief Model which explores variables of target audience perceived susceptibility, severity, barriers and benefits<sup>15</sup>; Theory of Planned Behaviour and Social Cognitive Theory which explore variables of perceived behavioral control, self-efficacy, outcome expectancy and environmental influences<sup>16,17</sup>; Diffusion of Innovations which examines the role of local opinion leaders in the diffusion of new agricultural practices<sup>18</sup>; and Nudge Theory which posits the importance of providing incentives to elicit greater engagement in health programs to influence dietary behaviours<sup>19</sup>. BCC program objectives emanating from the behavioural theories included increasing target audience awareness and knowledge about the risks of malnutrition; changing attitudes, beliefs and self-efficacy perceptions; shaping community social norms through influencers and other role models, increasing motivation to engage with the program through incentives; and building practical skills and behavioural intentions toward establishing KGs to grow nutritious, protein dense, produce.

Fieldwork approaches included the development of tailored discussion agenda for the SSIs. Given the ongoing insecurity in the Province a small field team of three staff was deployed to travel to the capital

city of Quetta to conduct the SSIs, and travel onward to project intervention Districts of Kharan and Nushki. The fieldwork was conducted over 12 consecutive days.

SSIs were facilitated with 16 key informants as the approach has been found to offer a flexible and powerful tool to capture local people's voices and how they create meaning from their experience<sup>20</sup>. Key informants interviewed included Program Directors, Deputy Directors and Program Managers, Provincial BCC Consultants, District Nutrition Officer's, the Head of the Lady Health Workers, and Provincial Nutrition Directorate staff working with at-risk groups. Additionally, Technical Advisor's and Team Leaders from the Women's Economic Empowerment and Agri-Business Units were interviewed as well as Trainers from the Food and Agriculture donor agency, as well as representatives from UNICEF, World Food Program, and the World Health Organisation.

Insights from the SSIs and the literature review informed the development of discussion agenda for FGDs. Eight FGDs were conducted with program beneficiaries as the approach has been found to be a pragmatic method of formative research with community participants who, on their own, may be reluctant to be interviewed or who may feel they have nothing to say<sup>21</sup>. Convenience samples of participants for the FGDs were selected following training workshops and during the field visits. Group segmentation included demand and supply side participants segmented by gender, age, socioeconomic status and location. A structured screening instrument was used to screen participants prior to recruitment (see Table 1). All study methods were carried out in accordance with relevant guidelines and regulations with reporting experiments on humans. Participants under 18 yrs of age were excluded from the discussion groups, while informed consent was obtained from all other participants through the FGD screening instrument, prior to taking part in the study.

A total of 124 participants took part in FGDs with 8-19 participants attending each of the groups. Male and female group moderators were trained to facilitate like-minded gender groups in local language, with each FGD taking approximately 60-75 minutes to complete. Data collection involved recording of all discussions and then compiling of the recordings into Word format. Recordings were supplemented through dialogue between team members, immediately following each group discussion. Notes were compiled in a question-by-question format to capture what the individuals had to say in regard to each topic with the notes from the SSIs and FGDs totalling 48 single-spaced, A4 pages.

Data analysis was conducted using NVivo software to uncover the most significant themes and issues related to the behavioural theories. Software analysis was supplemented with grounded theory approaches which use open, axial and selective coding to identify and categorizing the relationships of various categories as well using selective coding to identify other categories which may be part of the core categories<sup>22</sup>. Data from the literature review, the SSIs and FGDs was triangulated to provide a rich data-source for comparative analysis<sup>23</sup>.

## Results

A number of biopsychosocial and cultural determinants emerged from the analysis of the data-sets with the themes highlighted within core categories of project challenges, strengths and opportunities to support the behavioral interventions. Participant responses were also categorised according to key determinants from the predominant behavioural theories. Key challenges for the KGP included: Water scarcity/quality, human resource capacity, and lack of basic infrastructure, environmental and border challenges, gender inequality, and other cultural factors as well as behavioural issues related to poor knowledge and self-efficacy, particularly of women farmers, towards improved nutrition (see Table 2).

A number of strengths were also identified to provide insights for improved BCC nutrition interventions in Baluchistan. These included closed but also strong and motivated community networks, opportunities for greater program integration and ownership, cultural factors to facilitate message dissemination and behavioral change, and insights on potential influencers and predominant communication channels in the remote rural areas (see Table 3).

More specifically, a number of opportunities for the BCC project emerged from stakeholder and beneficiary discussions. Opportunity categories related to program messages, communication channels, human resources and what incentives could stimulate engagement by community members in nutrition initiatives (see Table 4).

## Discussion

The formative research to inform the design of BCC messages and interventions for the food security and KGP related nutrition programs have highlighted a number of challenges. The barrier and benefit analysis has also highlighted program strengths and identified opportunities to engage communities more fully in the behavioural change process. Given the dearth of prior BCC program intelligence on what may work in challenging cultural contexts, this formative research was critical in starting to build this evidence base to more fully explore the cultural, and social norms and other environmental and structural factors which need to be addressed through BCC to ensure the success of the program. This was particularly important as the review of behavioural theories highlighted that a number of maladaptive responses may be grounded in long held community customs and deeply entrenched cultural habits<sup>24</sup>. As such, this study has provided program planners with a better understanding of the cultural, socioeconomic, psychological, gender and other barriers to behaviour change in Baloch rural communities as well as providing opportunities on how best to leverage the scarce resources available for improved BCC interventions in the Province.

Cultural factors including deep-rooted dietary habits, gender inequality which disempowers women from decision making, and limited access to health and agricultural information was found to further limit self-efficacy and perceived behavioural control toward desired nutritional behaviour changes<sup>25</sup>. However, other researchers have suggested that greater nutrition-focused approaches to agriculture and the design and training of agricultural inputs may also empower caregivers to healthy dietary practices and thereby improved nutrition to their children<sup>26</sup>. Barriers categories also identified that the KGP and associated BCC

activities will not be successful if issues of water scarcity and infrastructure are not adequately addressed through a combination of interventions. This may require the development of more specific programs to ameliorate water insecurity, alongside the nutrition education and counselling interventions<sup>27</sup>. The triangulated findings highlight the need to address a range of behavioural determinants with BCC messages and interventions, including the provision of ongoing practical advice on planting, growing, maintaining and preparing produce from KGs, while being respectful of cultural issues when developing resource materials.

“We need to be considerate to the local context and culture. Pictorial messages should include both men and women, but women should be properly dressed and covered, and men should be dressed in shalwar and kameez and local hat”.

FAO Stakeholder – Quetta

Additionally, opportunities identified from the formative research include the willingness of opinion leaders and program beneficiaries to more fully engage in the program if training and educational items are provided to incentivise participants toward improved nutrition outcomes. This confirms findings from similar programs in other regional countries designed to empower communities toward improved agricultural practices<sup>28</sup>. Other opportunities to support empowerment identified through the findings include the potential for KGs to improve food security while facilitating easier access to food, reducing household expenditure, and improving household diets<sup>29</sup>, including food sovereignty and the localization of food systems<sup>30</sup> through more integrated, holistic approaches.<sup>31</sup>

This study found limited diversity in food products in the Province. This may be addressed by applying ‘Diffusion of Innovation’ approaches and identifying opinion leaders in the agricultural communities to grow and advocate for previously not considered protein dense, farming produce. This could include the provision of BCC materials and training supports for opinion leaders to facilitate the diffusion of greater range of innovations in the form of new seasonal food options to grow in KGs. The approach supports other studies which point to the need to promote dietary diversity as a critical nutritional feature for rural communities located in semi-and arid areas as well as promoting the value of grain legumes, rich in proteins and micronutrients, which also possess good adaptability to marginal rural environmental conditions.<sup>32</sup>

Pre-testing of a range of BCC resources also provided programmers with greater insights on the types of materials preferred by participants, including planting calendars, food mats promoting dietary diversity through locally sourced foods, posters, flip-charts and wall branding opportunities. Feedback from women on their motivation to engage in the nutrition related activities and the types of BCC materials preferred to support trainings, highlights the important role of women in achieving family food security and subsequently the need for greater women’s empowerment in the conservative rural settings. This emphasis on supporting greater gender equality by building women’s self-confidence and control over their food supplies and income is also evident in other country programs<sup>19, 33</sup>. Additional benefits not yet

realised through the program could include climate change adaptation and the preservation of biodiversity.<sup>34</sup>

Last, is the potential to build on the currently limited access to nutrition information cited by beneficiaries through specifically tailored messages to at-risk groups, and the dissemination of messages through more integrated and culturally appropriate communication platforms. The needs assessment identified that women in particular had limited opportunities to build knowledge about KGs, dietary diversity, economical food choices and nutritional benefits, given literacy challenges and the relatively low access to mass media communication channels. However, respondents did identify various opportunities for BCC program messages to cut through at community levels and through interpersonal communication. This included communication from trusted lady health workers, already living within these communities, coupled with training and materials incentives, with these activities having the greatest potential to impact on women's knowledge, attitudes and beliefs about KGs and nutrition. Given the critical importance of more fully engaging vulnerable women in remote Districts of Baluchistan, consideration should also be given to including their husbands in BCC activities as a result of their gatekeeping role, highlighted from the study and also identified in neighbouring communities<sup>35</sup>.

## Conclusion

The formative research rapid assessment method for application in resource constrained and insecure settings has provided considerable insights on how to increase the impact of nutrition programs through the development of culturally appropriate BCC materials and KG engagement in Districts of Baluchistan. The study contributes to the very limited research conducted in insecure, closed and conservative communities, while outlining an iterative, participatory, user-centred approach to support the development of tailored BCC messages and materials, and the identification of predominant message dissemination channels. Given these factors, the methodological and fieldwork approaches undertaken, and needs assessment considerations would also be relevant to the development of BCC programs in other arid and remote areas of a number of Middle Eastern and African countries, which also have closed, conservative communities, varying levels of insecurity, and facing similar drought/famine cycles.

BCC recommendations emanating from the findings include greater consideration of the use of empowering and personalised messages from community opinion leaders to highlight the benefits of establishing KGs, the building of women farmer's skills and confidence to improve self-efficacy perceptions and perceived behavioural control, while addressing cultural and gender sensitivities. Insights on program branding and BCC materials designs were also identified (to be reported on in another article) as well as highlighting the benefits of greater engagement by incentivising participants in the process of behaviour change. The issues identified through the needs assessment also point to a number of factors which may not be able to be directly impacted with BCC approaches, on their own. Therefore, greater commitments to the provision of infrastructure and financial supports can facilitate the behaviour change process while further building confidence in the KGP desired nutrition outcomes.

## Limitations

There are a number of limitations in conducting field research in resource constrained and insecure settings such as those found in remote rural Baluchistan. This includes limitations in the time available to collect the data given the risks to field staff. External validity may have also limited study findings with the application of subjective, nonprobability sampling using both purposive and convenience samples with voluntary participation. This included the limitation to access trainers and influencers of broad age ranges of 16-45 years that were available in the local communities, rather than having the time and human resources to segment a larger number of groups by age and location. This was due to the short time span for the work, the deliberate selection of participants based on what was needed to be known and the availability of knowledgeable or experienced people who were willing to provide the information, coupled with the general lack of access to women in the conservative cultural environments. Cultural constraints created additional limitations in the number of participants attending groups in some areas. Internal bias was minimised through the selection of items for the discussion agenda emanating from the literature review and advice from key informants.

## Declarations

### **Ethics approval and consent to participate**

All participants provided informed consent to participate in the study prior to the commencement of interviews and were offered the option to opt out at any time during the enquiry. All study methods were carried out in accordance with relevant guidelines and regulations with reporting experiments on humans. Ethics approval for the study was obtained from Dow University of Health Sciences, Ethics Committee (Approval number: IRB-/399/DUHS/Approval/2019).

### **Consent for publication**

The authors provide their consent to publish this study.

### **Availability of data and materials**

Additional data and materials pertaining to this study can be made available on request to the authors.

### **Competing interests**

The authors declare no competing interests, or other interests that might be perceived to influence the results and/or discussion reported in this paper..

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## Authors' contributions

TT managed the conception, design, interpretation of data and drafting the article. NFS, SKH, NS and SZ managed the translation of research instruments, fieldwork data collection and analysis and reviewed the final version to be published.

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## Tables

**Table 1.** Sampling frame, group profiles and locations for focus group discussions conducted in intervention Districts of Baluchistan (n=124)

| GROUP | LOCATION | SES | AGE   | GENDER & CRITERIA                |
|-------|----------|-----|-------|----------------------------------|
| 1     | Nushki   | C-D | 16-45 | Female Trainers (supply side)    |
| 2     | Nushki   | C-D | 16-45 | Female Influencers (supply side) |
| 3     | Nushki   | C-D | 20-34 | Male Influencers (supply side)   |
| 4     | Nushki   | C-D | 16-29 | Female Influencers (supply side) |
| 5     | Kharan   | C-D | 16-29 | Females (demand side)            |
| 6     | Kharan   | C-D | 30-44 | Females (demand side)            |
| 7     | Kharan   | C-D | 16-29 | Males (demand side)              |
| 8     | Kharan   | C-D | 30-44 | Males (demand side)              |

**Table 2.** *Program challenges identified from beneficiaries and stakeholders*

| Challenges  | Program Beneficiaries/Stakeholders feedback   |
|---|---|
| Water Scarcity/Water Quality                                | <p data-bbox="391 176 1422 243">“Telling people to make gardens when there is no water will not make any sense”.</p> <p data-bbox="391 273 883 306">Social Worker Stakeholder - Nushki</p> <hr/> <p data-bbox="391 336 1523 403">“The water we drink is the same as our animals drink and we do not boil it all the time. Diarrhea and weakness is very common”.</p> <p data-bbox="391 432 732 466">Female Farmer - Kharan</p> <hr/> <p data-bbox="391 495 1523 562">“We have abundant water, but the main problem is we do not have clean water in our area”.</p> <p data-bbox="391 592 727 625">Female Farmer - Nushki</p> <hr/> <p data-bbox="391 655 1451 722">“The primary problem is still water availability Our area was very prospering before the drought. We had all the cattle in our home”.</p> <p data-bbox="391 751 732 785">Local Politician - Nushki</p> |
| Scarce Human Resources                                      | <p data-bbox="391 819 1516 886">“Sometimes we are exhausted, and we have so much to do. The Polio campaign has been too much. Of course, we need to deliver but we are only human”.</p> <p data-bbox="391 915 789 949">Lady Health Worker - Nushki</p> <hr/> <p data-bbox="391 978 1429 1045">“We are paid very little and sometimes salaries do not come on time. They should increase our pay. We are in the front line”.</p> <p data-bbox="391 1075 805 1108">Lady Health Worker – Nushki</p>  |
|   | <p data-bbox="391 1138 1526 1205">“The health facilities in Kharan are not good. We need to take our sick to Karachi, that is very far”.</p> <p data-bbox="391 1234 732 1268">Female Farmer - Kharan</p>  |
| Lack of Infrastructure                                      | <p data-bbox="391 1302 1516 1402">“One thing the government can do is to provide drip irrigation systems. Planning should be long lasting as we have already suffered from a lack of water for years”.</p> <p data-bbox="391 1432 766 1465">FAO Stakeholder – Kharan</p>  |
| Poor knowledge and self-efficacy towards improved nutrition | <p data-bbox="391 1495 1497 1596">“Overall health is good, but our children are sometimes not well. They have dull skin. They cry a lot, maybe there are worms in their stomach. What should we do?”</p> <p data-bbox="391 1625 766 1659">Woman Farmer? – Kharan</p> <p data-bbox="391 1688 1497 1722">“Pregnant ladies should eat more; but then I used to work while I was pregnant.</p> <p data-bbox="391 1751 844 1785">Female School Teacher - Nushki</p> <hr/> <p data-bbox="391 1814 1490 1881">Low blood (anaemia) is very common in our community especially in girls and women. They feel weakness all the time”.</p> <p data-bbox="391 1911 786 1944">Lady Health Worker- Kharan</p>   |
| Cultural Factors  | <p data-bbox="391 1974 1503 2007">“Our men like to eat meat, for lunch and dinner. We mostly have vegetables and</p>  |

|                                    |   |
|------------------------------------|---|
|                                    | beans but for dinner. I try to cook at least one meat item. But not all the time; maybe two or three times a week”.   |
|                                    | Female Farmer - Kharan  |
| Gender Inequality                  | “In our society men are given preference over women. More and better food is served to men compared to women”.  |
|                                    | Female Farmer – Nushki  |
| Environmental Factors - Insecurity | “Due to droughts, unrest and trade restrictions at the Afghan border; people have now migrated to towns and cities. This influenced the culture of sourcing food from the land which has increased poverty and badly influenced health and food insecurity. |
|                                    | Political Leader - GoB  |

**Table 3.** Program strengths identified from beneficiaries and stakeholders

| Strengths                   | Program Beneficiaries/Stakeholders feedback   |
|-----------------------------|---|
| Strong Community Networks   | “We are from this area, they are from this area, and we are neighbours. We go there; they offer us food and drinks. We are like their family; they listen to each and everything we say and try to follow us”.                              |
|                             | Lady Health Worker - Nushki   |
| Program Integration         | “We give awareness on Nutrition to mothers’ groups, but they lack decision making authority about their children’s health. We think BCC will work better if we also educate husbands”   |
|                             | Lady Health Worker - Nushki   |
| Cultural Factors            | “When you speak the message, it should be in local language but if it’s a written message it should be in Urdu. Well, for anyone that is literate enough to read, Urdu is the basic language.”  |
|                             | Male School Teacher - Kharan  |
| Interpersonal Communication | “The best channels would be face to face communication. In that way we can certainly convince the other person. Balochistan’s local people respect guests and take their advice. Lady health workers and others may be a very good option”. |
|                             | Ministry of Health Stakeholder - Quetta   |
| Motivation to Engage        | “We would like to attend more activities such as Kitchen Garden trainings and nutrition education programs if they’re arranged within our community.  |
|                             | Female Farmer - Nushki)   |

**Table 4.** Program opportunities identified from beneficiaries and stakeholders

|  |   |
|--|---|
| Opportunities                            | Program Beneficiaries/Stakeholders feedback   |
| Willingness of opinion leaders to engage | <p>“We need to engage religious leaders and let them convince the local population on health behaviors. Religious leaders have a great influence on society especially on the males of the family.</p> <p>Religious Leader - Nushki</p>   |
|  | <p>“I think message should be delivered through lady health workers. Now we know the ladies in the houses; they are now our friends”.</p> <p>Lady Health Worker - Nushki</p>  |
| Communication Channels                   | <p>“Radio is important. Local FM stations are widely listened to in homes and markets. A local language message would substitute the need of reading through newspaper (literacy) as it reaches all family members at home”.</p> <p>Social Activist – Nushki</p>  |
|  | <p>“Posters and paintings in popular sites would help such as hospitals, market areas, vaccination centres and such. Giving a message that is targeted, and well written will have an impact”.</p> <p>WHO Stakeholder - Quetta</p>  |
|  | <p>“Men’s Whatsapp groups are formed through which beneficiaries get information on seeds and other KG related issues.</p> <p>FAO stakeholder</p>   |
| Incentives                               | <p>“Only delivering health and nutrition messages will not work without giving something to them. It could be a small gift, a calendar or anything. In this way we also feel more comfortable and confident”.</p> <p>Lady Health Worker - Kharan</p>  |
|  | <p>“Kitchen gardens are mainly managed by women. If you have a model kitchen garden in schools and colleges and show the students’ its benefits then they will take this home or when they get married, they may grow their own garden.</p> <p>Female School Teacher – Nushki</p> <p>“Health and financial benefits from home produced vegetables should be communicated in the messages for BCC”.</p> <p>Senior subject specialist GCEE – Nushki</p> |