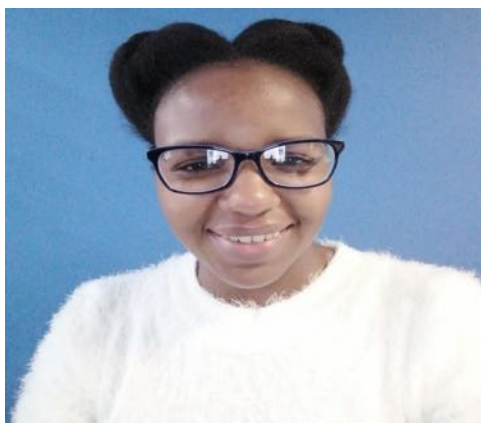


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AN ANALYSIS OF THE EFFECTIVENESS OF THE FETŠA TLALA INITIATIVE ON THE FOOD AND NUTRITION SECURITY OF WOMEN SMALLHOLDER FARMERS IN LIMPOPO PROVINCE, SOUTH AFRICA

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ABSTRACT

The Fetša Tlala Initiative is one of the development projects which were designed to contribute towards the achievement of the South African National Development Plan, 2030. The objective of the research was to analyse the effectiveness of the Fetša Tlala Initiative on the food and nutrition security of women smallholder farmers residing in Semaneng village, Limpopo Province, South Africa. The reason for focusing on women smallholder farmers was that whilst there has been research undertaken on the effectiveness of the Fetša Tlala Initiative, there has not been a study that focuses exclusively on women's perspectives about the Initiative. The study, thus, sought to break exploratory ground about the effectiveness of the Fetša Tlala Initiative from the viewpoint of women smallholder farmers. The study, thus, adopted a qualitative research design in the form of an exploratory case study. Data were collected using a semi-structured interview guide from 16 participants who were purposefully selected. Face-to-face interviews were conducted and then reflected upon using an inductive thematic analysis. Results of the research indicated that the food security initiative had mixed results. On the positive side, and consistent with one objective of the broader Fetša Tlala Initiative, agricultural inputs increased amongst the women smallholder farmers, which assisted them to boost their yields and improve household food security. The Initiative also empowered the women smallholder farmers by strengthening their collective resilience in the face of adversities they encountered during the project. Notwithstanding these successes, the research findings also indicate that the effectiveness of the Initiative was reduced because of the inconsistent institutional support provided by the appointed Fetša Tlala Initiative project managers. The inconsistent institutional support represented a top-down planning and management strategy premised upon a centralised decision-making model. As a consequence of this style of planning and management, the beneficiaries could only respond by building localised resilience to the challenges. Such agency from the beneficiaries suggests that future Fetša Tlala projects might benefit from a decentralised decision-making planning and management strategy, that is inclusive of the project beneficiaries from the outset. The paper recommends continuation of the Fetša Tlala Initiative with emphasis on transforming the institutional support so that future beneficiaries are included in decision making processes from the inception phases through to completion of projects.

Key words: Community resilience, Empowerment, Household food security, Resource constraints, Rural development



INTRODUCTION

In 2013, the South Africa cabinet officially signed off on the National Policy on Food and Nutrition Security alongside the Fetša Tlala Food Production Initiative (henceforth 'Initiative'). The rationale for the Initiative was to address the continuing national focus on agricultural productivity and household food security within the smallholder sector [1]. The Initiative also represented a planned contribution towards achieving the National Development Plan, Vision 2030 (NDP), which includes "increasing food production to increase food security" [2].

The national objectives with regard to implementation of the Initiative included: the reduction of challenges encountered in crop production; the provision of mechanisation services to support farming communities; and the encouragement of rural communities to utilise land for food production in order to promote food security at the household level [3]. One high priority area of the Fetša Tlala Initiative in Limpopo Province, South Africa which was implemented by the Department of Agriculture and Rural Development (DARD) was to address the challenge of equitable access to agricultural inputs, such as tractors, amongst smallholder farmers – as well as to reduce the high levels of food insecurity in the province [4]. Prior to addressing the methodological components of the article, some associated literature is summarised in order to provide the context within which the research was undertaken.

Associated literature: sub-Saharan Africa

In sub-Saharan Africa, small farms represent the foundation of the continental food system [5], and they are key to achieving the Sustainable Development Goals [SDGs], 1: Zero Poverty and 2: Zero Hunger [6]. It is often suggested that close to 80% of the smallholder farm workforce is comprised of women – but a recent statistic indicates the figure may be closer to 24% – 56% [7]. Nevertheless, in sub-Saharan Africa, women smallholder farmers remain a significant contributor to the smallholder agricultural sector and the backbone of household food security [8]. Despite these contributions, African women continue to experience diverse, sustained, gender-based inequities such as hierarchical, gendered power dynamics affecting decision-making processes, limited control over resources and disproportionately low, or non-remuneration for farm work, which have been documented in a myriad of peer reviewed publications [9]. Equally well documented are inequities with regard to food in/security of women smallholder farmers, despite their contribution to localised agricultural production and household food security [5].

The global response to these interdependent developmental challenges is now primarily associated with Goal 2 of the SDGs, which emphasises ending starvation, achieving food security – including enhanced nutrition – and promoting sustainable

agriculture, as well as doubling the incomes of small-scale farmers by 2030 [10]. Goal 2 also emphasizes the relevance of empowering women, indigenous people and smallholder agriculturalists in order to achieve these objectives equitably [11]. The practicality of achieving Goal 2 is also associated with other SDG Goals.

South Africa

In South Africa, the agricultural sector contributes almost 20% of the nation's overall employment sector and almost 117.5 billion South African Rands to the country's Gross Domestic Product (GDP) [13]. Smallholder farms in South Africa represent approximately 4.6% of national employment and 2.3% to the country's GDP, as well as contributing to rural household food security [14]. Within the smallholder farming sector, multiple gendered inequalities persist [15] and many women smallholder farmers and their associated households are considered food insecure [5]. An outcome of these multiple inequalities is the relatively low output of smallholder farms operated by women. The relatively low productivity has been linked to women's *"triple roles, limited access to education, having triple effects on access to technology, training and land rights"* in South Africa, as well as across the continent [16]. In South Africa, the Department of Agriculture Forestry and Fisheries (DAFF) suggests that the low productivity of women smallholder farmers can be especially attributed to the use of outdated technologies. In response, DAFF argues that in order to boost sustainable production by smallholder women farmers it is necessary to promote the use of improved agricultural inputs [1].

In summary, in sub-Saharan Africa, smallholder women farmers continue to experience a marginalised status for multiple reasons and that status affects their potential to boost both household income and food security. It is from within this context that the research was undertaken during the 2013/14 – 2017/18 growing seasons in Limpopo Province, South Africa.

MATERIALS AND METHODS

The study adopted an exploratory qualitative design. The rationale for adopting an exploratory qualitative design was to allow participants to share their lived experiences as beneficiaries of the initiative. Below is an outline of the processes followed to conduct the study.

Conceptual framework

The study was conceptually framed within the context of women smallholder farmers and food security, using a four-pillared model designed for assessing the sustainability of household food security [17]. The model is based upon the Food and Agriculture Organization's (FAO) longstanding definition of food security: when *"all people, at all times, have physical and economic access to sufficient safe and*

nutritious food to meet their dietary needs and food preferences for a healthy and active life" [18]. The four dimensions of the analytical model are summarised below:

1. Food availability – tangible evidence that food is available to a household, which includes multiple components such as subsistence food being produced, food stores, markets where food can be purchased, transportation options to/from markets and edible indigenous, or wild, foodstuffs.
2. Food accessibility – households possess sufficient resources to acquire and consume foodstuffs that provide a nutritious diet. This dimension may include the purchasing power of the household, access to land and/or resources to produce food and the accessibility of networks for food bartering.
3. Food utilization – refers to whether or not a household is optimising the nutritional benefits of available foodstuffs. A broad ranging pillar that considers the nutrient density of food that is actually consumed. Examples include knowledge about the benefits of different foods and dietary diversity; cultural preferences and food storage. This pillar is also inclusive of the equitable distribution of food amongst household members.
4. Food stability – a multi-dimensional pillar which directly refers to the extent that a broader population, household and/or individual is food secure at all times. At the population level, food security can, for example, refer to the resilience of agricultural food production systems in the context of climate variability. At the household level food stability refers to the resiliency of a household to ensure sufficient and stable food supplies at all times.
5. In the context of marginalised communities, the pillars are typically considered to be a *"fragile"* interdependent system within which a population, household and/or individual is constantly at risk of rapidly shifting from a state of food security to food insecurity if any of the pillars become weakened [19]. Within the context of marginalised communities, it is also often the case that many of the factors, or influences, which affect a food system are outside of the control of the population, household and/or individual [5]. It is from these perspectives that the study was undertaken.

Research approach

In this study, an interpretive phenomenology paradigm was applied. Phenomenology focuses on the lived experiences of humans and how they perceive things through individual consciousness [20]. Interpretive researchers, thus, study the lived experience of participants, rather than just people's observable behaviours. Thus, interpretive phenomenology is used to describe, understand and interpret participants' experiences and represents an analytical process based on the

understanding that social contexts are embedded within, and manifest through, individual and collective actions [21]. The interpretive phenomenological approach was augmented by a thematic data analysis which was applied to interpret the detailed accounts volunteered by the participating respondents. In order to collect relevant data, a case study design was applied because a detailed analysis of the “case” is more insightful than attempting to study a large sample [22].

Study area

The study was conducted at Semaneng village which is located under the Bakone Tribal Authority and the broader Polokwane Local Municipality within the Capricorn District Municipality, Figure 1.



Figure 1: The study site – approximate location of Semaneng village

Source: <https://www.google.com/maps/@-27.6574191,26.6386863,6z?entry=ttu>
(Accessed November 2023)

Semaneng village is located on the R567, 58 kilometres north-west of Limpopo Province’s capital city, Polokwane. The village was chosen as the study site because it was one of the communities in the Limpopo Province, where the Initiative was implemented during the 2013/14 – 2017/18 growing seasons.

Study population

A study population is representative of the total population from which research data are gathered [23]. In this instance, a list of all Semaneng residents who were the intended beneficiaries of the Initiative was provided by the Limpopo Department of Agriculture (LDoA) in accordance with the Protection of Personal Information Act (POPIA) 4 of 2013. The listed indicated that forty (40) community people were the targeted beneficiaries during the 2013/14 – 2017/18 growing seasons.

Sampling

Inclusion criteria were that the selected participants were women and that they were recipients of the Initiative during the 2013/14 – 2017/18 growing seasons. Due to the qualitative nature of the study, a non-probability sampling method was applied [24]. In this instance, purposive sampling was applied to ensure that the participants who were selected had extensive knowledge of the Initiative. The sample size of participants in phenomenological research typically ranges from two to twenty-five, and the participants should both reflect and embody the “*group homogeneity*” among them [25]. In this instance, the group homogeneity was that the participants reflected the characteristics and qualities of the entire smallholder population. The final sample was sixteen (16) women smallholder farmers.

Ethical considerations

Ethics has long been considered an integral component of social research [26]. In this instance, prior to beginning, the research ethical clearance was obtained from the University of Limpopo’s Turfloop and Research Ethics Committee (TREC/371/2020: PG); permission to undertake the research in Semaneng village was obtained from the Bakone Tribal Authority and each participant signed an informed consent agreement. During and after the research, the lead researcher ensured that all protocols relating to harm, confidentiality and anonymity were observed. Furthermore, throughout the research process, protocols relating to respect, dignity and an appropriate standard of care of participants were observed. As a consequence, the ethical component of the research did not meet with any unexpected challenges.

Data collection

The semi-structured interviews were undertaken in the participants’ home language (Sepedi) and took approximately 45 minutes at the participants’ homes. During the interviews the researcher also probed further for more information, or clarification, about any intriguing or unclear answers as required. All interviews were recorded and written notes relating to each interview were taken.

Data analysis

An inductive approach to the thematic analysis was adopted for this study. The inductive approach enabled the researchers to begin the data analysis without a *priori* assumptions about the type of themes that would emerge because the research was exploratory [27]. The overall process is summarised below, Figure 2.

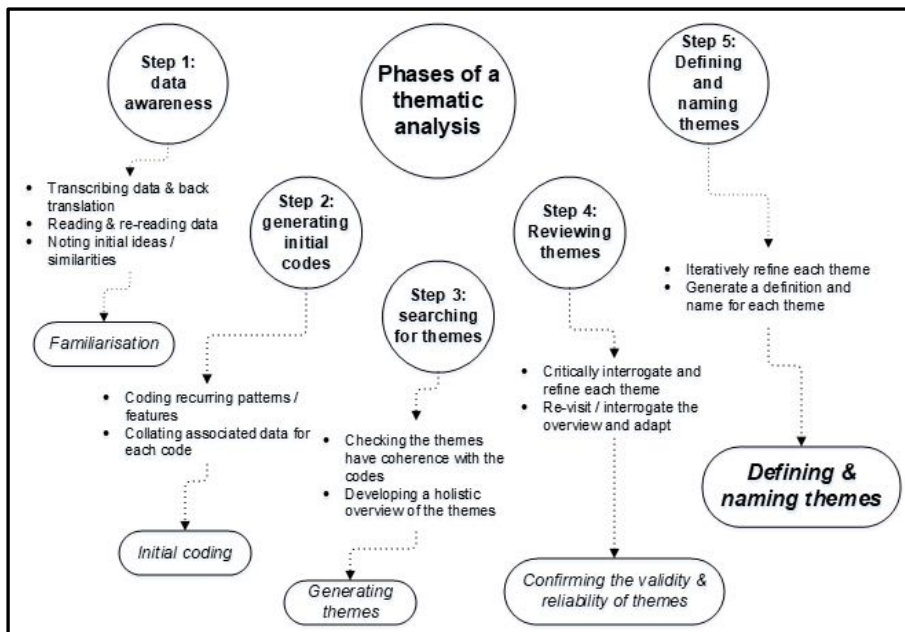


Figure 2: The inductive thematic analysis process applied during the research

Source: adapted from Bingham [28]

As described above, a thematic analysis involves collecting non-numerical data – such as narratives – and analysing that qualitative data by first developing codes and then distilling those codes into broader themes [29].

Data coding

Prior to beginning the analytical process, the raw data were transcribed *verbatim* in Sepedi, then translated into English and then back translated into Sepedi by an independent collaborator in order to verify the initial translation [30]. Once the translation and back translation process was complete, the coding process of the raw data began.

Coding requires breaking down the raw data and collating them into clusters of like for like codes. The codes (recurring patterns) are characterised by their common points of reference, which are “*lurking in the data awaiting*” identification by the researcher/s [29]. The coding process also reduces the large amount of textual data into more manageable chunks for the remainder of the analytical process [31].

Thematic analysis

Themes are representations of important ideas, activities and/or occasions that the participants continually characterize, question, and/or discuss [32]. Identifying themes requires a systematic, yet iterative process of examining the participants' assigned meaning relating to each code – as well as the interdependencies between codes [33]. The theme development was a “*systematic, organized and iterative process*” that entailed grouping the codes to locate broader, more abstract, patterns

and gradually synthesising the fragmented data into coherent entities that became the themes [28]. In order to ensure that the emerging themes were meaningful within the context of the participants' lived experience, hence trustworthy, the validity and reliability of the themes were challenged by the research team and participants [34].

RESULTS AND DISCUSSION

Prior to the implementation of the Initiative in Semaneng village, some of the participants found it unaffordable to buy staple foods such as maize. As a consequence, wild foodstuffs such as Bambara groundnuts were harvested and used as a staple food substitute.

"We suffered as it was difficult to buy food because the prices were too high. The project came as a breakthrough because we were able to fight starvation. The state of food security in our families improved."

[Participant 1]

The above extract provides a sombre metaphor of the relevance of agricultural support programs for marginalised communities in Limpopo Province. The notion that some participants of the Initiative *'found it unaffordable to buy staple foods'* also has resonance with dimension #1 (Food availability) of the four-pillar model presented above. The statement also has resonance with multiple reports with regard to food security in the Limpopo Province, including one that states that *"52% of the rural households in Limpopo Province of South Africa were considered severely food insecure"* [35]. However, the Fetša Tlala Initiative did begin to alter that context. The themes that emerged are presented below.

Theme 1: Equitable access to infrastructure

The participants applauded the DARD for providing them with some of the equipment that they could not afford. Specifically, access to a tractor was repeatedly referred to because hiring, or buying, a tractor was prohibitively expensive for them.

"I have always been eager to plant maize but could only do so on a very small piece of land due to the affordability of a tractor."

[Respondent 7]

The beneficiaries of the Initiative valued the agricultural inputs, such as manure and seeds, provided by the DARD.

"I was thankful that I received a 10 kg bag of maize seeds, 50kg of manure and the tractor came to cultivate for me".

[Respondent 11]

The participants expressed their appreciation to the DARD for these inputs because access to the inputs enabled them to plant maize on larger pieces of land than was

previously possible. As a consequence, the participants were able to harvest a maximum of twenty-five (25) bags of maize weighing 50 kilograms each.

"This project gave me an opportunity to expand the size of land and I am delighted that I was able to harvest 25 bags of maize, weighing 50 kilograms each".

[Respondent 8]

The bags were then transported to a milling facility where the beneficiaries paid for storage and grinding at a price, they considered to be fair.

"Every time I want maize meal, I would go to the milling facility and buy with less money than what the local shops charge us. The number of kilograms I would be taking would be subtracted from what I have at the mill."

[Respondent 4]

It is evident that most of the active beneficiaries' agricultural output rose as a result of the Initiative. It is also evident that the Initiative's beneficiaries improved their households' food security. The increased yield was reported to have been a direct consequence of the inputs that were made available to the beneficiaries of the Initiative by the DARD which has synergies with the first and second dimensions of the four-pillared model (Food availability and accessibility).

As a consequence of the increased yield, the beneficiaries of the Initiative were also able to utilise the services of the storage mill and access the milled maize beyond the harvesting season which has synergies with pillar #4 (Food stability). The latter observation – utilising the services of a storage mill – represents a household agro-processing food security measure which is a service that is in short supply in Limpopo Province among smallholder farmers. Multiple observers, including the Agricultural Research Council (ARC) and the Department of Rural Development and Land Reform (DRDLR), are promoting the introduction of agro-processing facilities for smallholder farmers so this example may be an opportunity to contribute towards that pragmatic ambition [36].

Theme 2: Frustrations with the DARD

Despite the benefits of the Initiative, there were frustrations. For example, an irrigation system was promised to the participants, but it was never delivered. The recipients were consequently forced to depend on rainfall to water their crops.

"An irrigation system was promised to us, but it did not come. The system would have saved our emotions to worry about whether the rain would come."

[Respondent 4]

Another example of the experienced frustrations was the way in which the Initiative was administered by the DARD. For example, the participants explained that the Initiative's execution was delayed and operations were hampered.

“Due to the delays in planting because the tractor did not arrive and some people left the project.”

[Respondent 3]

An example of operational challenges was that only one tractor was provided to plant for all beneficiaries.

The tractor was not able to plough for everyone. People became hopeless because the planting season was almost over and they had not yet planted.”

[Respondent 10]

Due to these frustrations, some members withdrew from the Initiative. The participants expressed their frustration about these uncertainties and in some instances referred to them as ‘false promises’.

“Due to the delays in planting and false promises, other community members withdrew from the project.”

[Respondent 3]

The frustrations described by the participants go beyond the four-pillared model, but do demonstrate that the organisational capacity of the DARD to coordinate the utilisation of the tractor efficiently detracted from pillar #1 (Food availability). The frustrations that were cited with regard to ‘false promises’ underscores the inadequacies of the services provided by the DARD. Evidence from related literature suggests that the organisational shortcomings of the DARD in Semaneng village was not a unique occurrence [37]. Overcoming these distractions from achieving the project objectives could be ameliorated in future. This can be possible if the DARD begins an urgent process of engaging with the beneficiaries in a frank dialogue. The DARD should then reflect internally about the institutional processes that require transformation so that their service delivery to clients improves.

Theme 3: Community resilience

An unintended consequence of the frustrations was ‘community resilience’ in the face of adversity. For example, one extension officer was assigned by the DARD to act as the Initiative's coordinator. The coordinator was tasked with monitoring and evaluating the Initiative's daily operations, as well as to provide agricultural mentorship. The participants reported that they met with the coordinator just once prior to the Initiative's launch. After the resources were disbursed, there were no further meetings with the coordinator.

The participants also explained that as a consequence of the coordinator's absence, they had to assume grassroots responsibility to arrange the planting procedure as a collective.

“When we noticed that the coordinator was not showing up, we selected representatives who would oversee the implementation of the project.”

[Respondent 10]

Further to the expectation that the coordinator would assume a monitoring and evaluation role, it was also expected by the beneficiaries that agricultural expertise – or guidance – would be provided by the DARD. This service was not delivered.

“I was looking forward to the extension services such as agricultural support from the coordinator, but the person was not around, so we tried to learn more ourselves.”

[Respondent 2]

Despite the absence of the DARD coordinator, the participants reported a grassroots workaround which included appointing community representatives to coordinate the Initiative, as well as attempting to learn more about agriculture themselves. This example of organic resilience in the face of adversity has synergies with Goal 1.5 of the SDGs, which calls for increased *“resilience of the poor and those in vulnerable situations and reduce their exposure and vulnerability to other economic, social and environmental shocks”* [12] and multiple peer-reviewed perspectives relating to South Africa [4] and beyond. The resilience that emerged also indirectly has synergies with #1 (Food availability) and #2 (Food accessibility) of the four-pillared model presented above.

Theme 4: Knowledge sharing

It was reported that working together as a team became an unexpected component of the project experience. This occurred because the support from the project administrators was not as comprehensive as the beneficiaries had expected, which resulted in a community-organised sharing of their collective agricultural insights and experiences.

“The Department did not get us an agricultural expert to train us. We were just doing things as we saw fit. Then we learnt to share knowledge about ploughing between ourselves.”

[Participant 6]

Participants also reported that they went beyond the immediate project group and approached a broader social network to improve their agricultural knowledge.

“After we organised ourselves and elected coordinators, we also decided that we needed to learn more about ploughing. Members of the project began asking their family members and others for information about ploughing and we shared that with others.”

[Participant 10]

Not only did the beneficiaries generate and share knowledge between themselves, they also enjoyed a sense of empowerment. For example, some participants expressed gratitude for the Initiative because it enabled them to showcase their potential as women. Specifically, the Initiative provided an opportunity for the women to become active livelihood agents, rather than passive victims, of their constrained socio-economic circumstances.

“Growing up we were taught that men must go and work for their families while the women stay at home and nurture the children. This was actually closing up our capabilities. I am thankful for this project because it changed this by showing us we can work together with our own knowledge.”

[Participant 9]

Knowledge sharing represents an example of how the community resilience was operationalised and directly contributed towards pillars #1 (Food availability) and #2 (Food accessibility). The sense of empowerment may also indirectly contribute to achieving pillar #4 (Food stability) in that the beneficiaries' self-confidence in their abilities to produce food was boosted – which may suggest that they will be better placed in future to initiate their own food production systems.

A summary of the effectiveness of the Initiative on the food and nutrition security of women smallholder farmers in Semaneng village is provided in Table 1. Table 1 suggests that, despite the frustrations with the DARD, the Initiative did go some way to contribute to the broad goals of the national Fetša Tlala Food Production Initiative and to the NDP's ambition of “increasing food production to increase food security” and Goal 2 of the SDGs [2]. The narrative with regard to resilience and the sense of agency of some beneficiaries provides some evidence of empowerment for the smallholder women which has been shown to produce a meaningful impact on food security in sub-Saharan Africa [40]. However, the Initiative did not produce any reported impact #3 (Food utilization) of the four-pillared model.

The other observation that can be drawn from Table 1 is a reflection on the combination of Themes 2 – 4 (Frustration with the DARD, Community resilience and Knowledge sharing). Specifically, in this instance, it is evident that the project management by the DARD contributed to sub-optimal implementation of the Initiative. The implementation was designed in a top-down manner that morphed into an Initiative that was implemented in a bottom-up style. From this perspective, it is recommended that to improve the outputs from future, similar projects require the DARD to reflect on their internal capacity to deliver, to consider the relevance of including pillar #3 (Food utilisation) into the planning phases and also to consider an alternative planning and management model. The alternative model is for the DARD to transform their existing ‘top-down’ project planning and management approach

which is dominated by centralised decision making, into a more horizontal ‘top-down and bottom-up’ strategy characterised by distributed decision making which has been found to be effective in other contexts [38].

CONCLUSION AND RECOMMENDATIONS FOR DEVELOPMENT

Despite the limitations associated with qualitative research, this exploratory qualitative study provides localised insights into the effectiveness of the Fetša Tlala Initiative on the food and nutrition security of women smallholder farmers in Semaneng village. On the one hand, the Initiative did contribute to pillars #1 (Food availability), #2 (Food accessibility) and #4 (Food stability) of the four-pillared model. However, the Initiative did not contribute to pillar #3 (Food utilization). It was also evident that the institutional capacity of the DARD to operationalise the Initiative constrained the planned activities. That being said, an unintended consequence which emerged in the face of the administrative limitations of the DARD was a sense of agency and empowerment – described above as ‘resilience’ – which surfaced among the women smallholder farmers.

It is evident from the smallholder women’s evidence that the continuation of the Fetša Tlala Initiative is justified – with one caveat. The caveat is that the agency displayed by some participants does suggest that, moving forward – and with some reflection – the DARD could consider a less top-down project planning and management style. The participants reported that they were hoping for future projects. If the DARD were to consider more of a bottom-up project planning and management style, it would likely bring the agricultural inputs and expertise for the participants. The participants were hopeful that more projects can simultaneously energise and harness the agency of the smallholder women farmers as active partners throughout the planning and management process. It is plausible that this alternative planning and management approach could facilitate a mutually beneficial, professional relationship between the DARD and future project beneficiaries.

Table 1: Summary of the effectiveness of the Initiative in Semaneng village

Theme	Contributed to	Reduces the opportunities to achieve
Equitable access to infrastructure (initiated by the DARD)	Food availability Food accessibility Food stability	
Frustration with the DARD (initiated by the DARD)		Food availability
Community resilience (community agency)	Food accessibility (indirectly) Food stability (indirectly)	
Knowledge sharing (community agency)	Food availability Food accessibility Food stability (indirectly)	

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