

A photograph of three people in a rural setting. On the left, a woman in a patterned shirt carries a large bunch of green bananas on her head. In the center, a young girl in a blue shirt holds a bunch of green leafy vegetables. On the right, another woman in a patterned shirt stands smiling. The background shows a thatched roof and lush greenery.

BETTER AND ENHANCED NUTRITION PROJECT (BEAN)

Papua New Guinea | Progress Brief
(2022–2027)



About this report

This progress brief summarises findings from the mid-term review of the Better and Enhanced Agriculture for Nutrition (BEAN) Project in Papua New Guinea. The review was conducted by Schneider Global Health Consultancy in February 2025, and reviewed by Tony Alphan (World Vision Papua New Guinea), Karen Mejos, and Erica Bradford (World Vision Australia). For more information, please contact erica.bradford@worldvision.com.au.

The BEAN Project is supported by the Australian Government through the Australian NGO Cooperation Program (ANCP).

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Front cover photo:

World Vision supports child-focused programming in Madang Province (Momase Region) and Western Province (Southern Region) of Papua New Guinea, including two projects delivered through the Australian NGO Cooperation Program (ANCP).



BACKGROUND

Goal	Children under 5 and their mothers are well-nourished
Timeframe	2022-2027
Location	Delta Fly District in Western Province

The **Better and Enhanced Agriculture for Nutrition (BEAN) Project**, implemented in Delta Fly District, Western Province, aims to improve nutrition for vulnerable groups, especially children under five, mothers, and people with disabilities. Aligned with Papua New Guinea's national nutrition and food security policies, BEAN supports sustainable agricultural practices, inclusive economic development, and strengthened community health systems. A mid-term review was conducted to assess progress, effectiveness, and learning.

KEY MIDTERM FINDINGS

The BEAN Project's qualitative midterm review highlights encouraging progress in food security, nutrition, financial inclusion, gender equality, and disability inclusion in BEAN project communities.

FOOD SECURITY THROUGH CLIMATE-SMART AND NUTRITION-SENSITIVE AGRICULTURE

- The Lead Farmer model has strengthened peer-to-peer led knowledge sharing and boosted food production across communities.
- Improved crop yields and diversity are contributing to more balanced and nutritious household diets.

FINANCIAL INCLUSION AND RESILIENCE

- Savings groups have strengthened household financial resilience, enabling members to reinvest in farming and small businesses.
- Members report improved financial literacy and the ability to save for emergencies, school fees, and essential needs.

POSITIVE SHIFTS IN INFANT AND YOUNG CHILD FEEDING (IYCF)

- Knowledge on IYCF has improved across target communities, supported by Village Health Assistants.
- Breastfeeding and complementary feeding practices have improved, particularly among households participating in cooking demonstrations.

ADVANCING GENDER EQUALITY AND DISABILITY INCLUSION

- Women's participation in decision-making has increased across both domestic and productive spheres.
- Shared caregiving and joint decision-making around food and nutrition are becoming more common.
- People with disabilities are increasingly participating in training and community life, supported by growing community acceptance and inclusion.

VOICES FROM THE FIELD

“We used to eat only sago and fish, but now we have greens and vegetables and understand their nutritional importance. We plant and harvest, and any surplus we sell for income.”

– Contact Farmer

“VHAs conduct cooking demonstrations and teach how to feed babies with a balanced meal. We have seen positive changes in our children’s health due to better feeding practices. We now wash our hands before eating and after using the toilet.”

– Parents Support Group

“Men and women now share responsibilities. Women actively participate in household decision-making about income and food.”

– Parents Support Group



Kamo, his wife Helen (far left) and five daughters with their garden produce in Saiwase village.



Nasato tends to her backyard garden, where she grows seeds that were provided to her through the BEAN project.

PROJECT OVERVIEW

In Papua New Guinea (PNG), nearly half of all children (49.5%) under five are stunted, 14.1% are wasted, and 27.8% are underweight.¹ These figures are even more severe in Western Province, where over 50% of children under five are stunted and one in four children under two is underweight.² The reasons are complex: food insecurity, poor nutrition, limited access to health services and clean water, poverty and vulnerability to environmental shocks such as flooding and soil degradation. A baseline study in Delta Fly District³ found that 90% of households are chronically food insecure, with over half experiencing severe shortages during floods. Fewer than 2% of children and 1.5% of women met the minimum dietary diversity threshold, and only 16% of mothers exclusively breastfed. Gender inequality also contributes to this. Low or no income, coupled with gender-based violence and an unfair burden of work around the home reduces women's power to make decisions on health and nutrition for themselves or their families.

World Vision Papua New Guinea's Better and Enhanced Agriculture for Nutrition (BEAN) Project, supported by the Australian Government through the Australian NGO Cooperation Program (ANCP), is meeting these challenges in the Delta Fly District, Western Province. The project aims to improve nutrition for all community members, with a particular focus on children under five, their mothers, and people with disabilities. The project works towards this goal in two ways:

OUTCOME 1: IMPROVED FOOD SECURITY THROUGH BETTER AVAILABILITY AND ACCESS TO DIVERSE, NUTRITIOUS FOODS

BEAN supports climate-smart agricultural production which in turn increases availability of nutritious food, from household into community-level markets. Local institutions, particularly government partners, are learning to lead and coordinate sustainable agricultural initiatives. Key activities involve expanding access to quality seeds, training lead farmers (especially women), and promoting income generation through savings groups.

OUTCOME 2: IMPROVED PRACTICE THAT SUPPORT THE CONSUMPTION AND UTILISATION OF NUTRITIOUS FOODS

BEAN promotes inclusive nutrition and caregiving through community-led education for behaviour change and women's empowerment. Village Health Assistants are promoting IYCF alongside disability inclusion, harmful gender norms and the importance of men's involvement in children's healthy development.

¹ *Joint Child Malnutrition Estimates Expanded Database: Stunting, Wasting and Overweight*. Published online July 2020. Available at: <https://data.unicef.org/resources/dataset/malnutrition-data>. Accessed 20 May 2025.

² World Vision Papua New Guinea. *Infant and Young Child Feeding Practice, Behaviour and Growth in TB-Affected Communities of Western Province*. Assessment Report. Available at: https://devpolicy.org/pdf/blog/World-Vision_Infant-and-young-child-feeding-and-growth-in-TB-affected-communities-in-Western-Province_FINAL.pdf. Accessed 20 May 2025.

³ *Better and Enhanced Agriculture for Nutrition (BEAN) Baseline Survey Report*. June 2023. Available at: [internal report – World Vision Australia]. Accessed 20 May 2025.

THEORY OF CHANGE

Goal: Improve the nutritional status of children under five and their mothers, benefiting 12,392 people by 2027.



PROJECT MODELS AND APPROACHES

Climate-Smart Agriculture (CSA)	CSA enables farmers to adopt sustainable, climate-resilient sustainable practices with the aim to increase food production and diversification. This systems-based approach supports adaptation to climate shocks while improving household nutrition and food security.
Nutrition-Sensitive Agriculture (NSA)	The NSA approach integrates nutrition objectives into agri-food systems interventions. It focuses on increasing access to diverse, nutrient-dense foods and improving the dietary quality of women, children, and their households.
The Lead Farmer Approach	Local farmers trained as Lead Farmers act as peer educators to spread CSA and NSA practices across communities. This participatory extension model boosts adoption, strengthens community knowledge systems, and enhances the sustainability of farming innovations.
Savings for Nutrition (S4N)	S4N groups provide a platform for community savings and financial literacy while reinforcing nutrition awareness. Funds saved are used for urgent needs such as health, nutrition, or agriculture inputs, improving both financial resilience and dietary outcomes.
Village Health Assistant (VHA) Program	Community-based VHAs deliver vital health and nutrition messaging, support early childhood nutrition and care, and act as a bridge between communities and health systems. The model enhances community nutrition awareness and local ownership of health practices.
Infant and Young Child Feeding (IYCF)	Based on World Health Organization guidelines, IYCF training equips caregivers with knowledge on breastfeeding, complementary feeding, and child growth. Delivered through VHAs and health workers, this approach improves child nutrition, especially for the most vulnerable.
Celebrating Families (CF)	A faith-based model tailored to the PNG context, CF promotes positive gender attitudes, shared household responsibilities, and stronger family relationships. It also addresses gender-based violence and disability inclusion, supporting more equitable and resilient households.



A young pumpkin in a lead farmer's thriving garden.



A happy farmer looking forward to seeing the outcomes of using new gardening techniques.

ABOUT THE MID-TERM REVIEW

World Vision PNG commissioned an independent mid-term review in February 2025 to measure progress over nearly three years of implementation. The review used a multi-method, largely qualitative approach co-designed with local staff to ensure cultural relevance and local ownership. It drew on focus group discussions with farmers, parent support group members and savings group members, as well as interviews with stakeholders, lead farmers and community leaders. Interviews with caregivers of children with disabilities across six communities also provided vital viewpoints on how the project was supporting this vulnerable group.

As with any study, limitations were considered. The qualitative design, while rich in community perspectives, cannot represent generalised change across all locations. Other challenges such as translation nuances, variable data quality, and limited quantitative triangulation may have influenced the consistency of findings. The consultant spent some time on sense-checking initial findings with staff and community to reduce any bias driven by these limitations.

FINDINGS BY OUTCOME

OUTCOME 1: MORE FOOD, INCREASED INCOME AND BETTER NUTRITION

“Farmers now grow a variety of crops instead of just one. The project introduced different food crops, leading to better nutrition.”

– Lead Farmer

Households report growing a wider range of crops, leading to more balanced diets. Contact Farmers trained under the Lead Farmer approach are now applying climate-smart techniques such as mulching, raised garden beds, and seasonal cropping calendars. These approaches have been reported to increased yields and greater resilience, especially in flood-prone areas.

Climate-resilient seed varieties provided by the National Agricultural Research Institute have strengthened household adaptation and food security. Three greenhouses have been established to serve as seedling hubs in Awaba, Balimo, and Waya. Demonstration plots supported by the Department of Agriculture and Livestock now feature improved food crops.

“Before, we only ate fish and sago, but now we grow vegetables. New crops include peanuts, cabbage, tomatoes, eggplant, cucumber, and beans.”

– Contact Farmer

Farmers are not only feeding their own households but also supporting others. In many communities, surplus produce is shared informally, easing the burden of food insecurity for the most vulnerable.

“We contribute to the community by sharing food at gatherings.”

– Contact Farmer

The climate-smart, nutrition-sensitive agriculture adoption through the Lead Farmer approach has

increased crop production and diversity, resulting in better household diets. Across all focus groups, including women and people with disabilities, there was strong agreement that the project has brought tangible benefits to farming practices and food access.

Lead farmers reported greater economic resilience, noting that selling produce to table markets has provided new income streams. Some are beginning to reinvest these earnings into their farming activities, helping strengthen production capacity. However, most contact farmers are using their income primarily for school fees and household needs, with limited funds left for reinvestment.

While local market access is improving gradually, barter system remains prevalent in remote communities due to low cash circulation. Persistent barriers include high transport costs and limited infrastructure, which make it difficult for farmers to reach larger, more profitable markets.

“Many farmers are now selling their produce in local markets. However, sales remain limited as most farming is still classified as backyard gardening. Loan repayment is difficult due to cash flow issues.”

– Government stakeholder (agriculture)

“Cash flow is low in our market, making sales difficult. We sell to local markets and directly to consumers.”

– Contact Farmer

Women are increasingly active in farming and food decision-making, with some households beginning to challenge traditional gender norms. While leadership roles remain limited, community support for women's involvement is growing. There is strong consensus across communities that women's participation in farming and decision-making has increased. Both men and elders are reported to support this shift.



World Vision's Health and Gender Technical Lead, Ainda Piako, stands in the recently built greenhouse in Balimo.

"The community, including men and elders, accepts women's participation."

– Woman Lead Farmer

"Women actively participate in farming."

– Contact Farmer (Women's FGD)

The participation of people with disabilities in farming and savings activities has grown across most project areas. However, mobility challenges, limited access to assistive devices, and gaps in tailored training continue to limit full inclusion.

"The lead farmer gave us seeds to plant, and I started doing my farming. I harvested my cassava and sweet potatoes for eating and marketing. Community leaders are very vocal in taking care of us in our communities."

– People with disability

are applying improved budgeting, recordkeeping, and planning skills, enabling better management of income and expenses.

S4N members reported using their savings mainly for reinvesting in agriculture inputs, education, emergencies, and essential household items. While savings groups primarily prioritise these immediate needs, observations indicate that investment in nutritious foods is gradually increasing as household incomes rise.

"Our last cycle's total savings ranged from 4,000 to 5,000 Kina."

"I built my house through the savings group, and now my husband and I are living inside."

"As a woman lead farmer, my kids are attending Goroka Business College, and I have a huge garden to support their education."

"Agriculture and gardening are good for savings. Social funds help in emergencies."

– Savings Group (Women's FGD)

Savings groups as a pathway to financial resilience

Savings for Nutrition (S4N) groups were found to be helping households, particularly women and people with disabilities, to build savings, access small loans, and manage finances more effectively. Five savings groups (84 members, 48% women) meet regularly to manage savings and loans, supported by trained committees and equipped with savings kits. Households



With tools in hand and new skills from recent training, lead farmers in Tai, Kotale, and Waligi communities are eager to put their knowledge to work.

OUTCOME 2: STRENGTHENING COMMUNITY HEALTH SYSTEMS THROUGH VILLAGE HEALTH ASSISTANTS

Interviews confirmed the Village Health Assistant (VHA) program has played a critical role in promoting healthy, inclusive, and age-appropriate nutrition practices across the district. VHAs continue to monitor child growth using mid-upper arm circumference tapes and weight scales, with several malnourished children showing recovery through improved feeding practices and early referrals to health services. Caregivers widely reported high satisfaction with the VHAs' work, particularly valuing their household visits, health education, and practical cooking demonstrations.

“One girl who lost weight due to tuberculosis regained her strength after learning about balanced meals from VHAs.”

– Parent Support Group

“VHAs teach how to feed babies balanced meals. We’ve seen positive changes in our children’s health. We now wash our hands before eating and after using the toilet.”

– Parent Support Group

VHAs are not only improving nutrition behaviours but also strengthening links between households and health services. At mid-term, 34 VHAs (56% women) are active across project sites, receiving initial training, refresher sessions, and tools from World Vision. While community ownership of the VHA model is strong, stakeholders emphasised that sustained impact would require full integration into formal health systems. Efforts are underway to engage Provincial Health Authority and National Department of Health in joint planning and resource mobilisation to institutionalise VHAs.

Focus group discussions with parent support groups revealed that new knowledge gained through the project has contributed to healthier food consumption practices. Households are now preparing more balanced meals with greater dietary diversity, incorporating at least four essential food groups. Cooking demonstrations have been especially well received, with community members praising them as practical, culturally relevant, and effective in promoting nutritious meal preparation. Parent support groups also report growing a wider variety of crops, which has improved access to diverse and nutritious foods.

“After a two-week [IYCF] workshop, we observed significant improvements in community nutrition practices,”

– Government stakeholder (health and nutrition)

Driving nutrition and hygiene behaviour change through community champions

Community champions including the VHAs, faith leaders, and teachers, have played an important role in the widespread messaging on nutrition and hygiene. Men's participation as nutrition champions varies, with some areas seeing progress while others maintain rigid gender roles. Where men are engaged, improvements in shared caregiving and dietary decisions have been observed. The Celebrating Families model contributed to improved family relationships, reduced domestic conflict, and greater male involvement in caregiving. Faith leaders, VHAs, and teachers have emerged as key champions of change, using community platforms and church gatherings to reinforce IYCF and WASH messages. However, in some communities, awareness and implementation remain limited among men.

“The church brings people together and helps spread awareness on hygiene and nutrition”

– Faith leader

“Celebrating Families training helped reunite divided families.”

– Women's representative

“Men's participation in cooking and childcare has increased, however, some men still refuse to join cooking demonstrations due to cultural beliefs.”

– Parents support group

In one village, VHAs reported that community norms have shifted, with mothers now understanding the importance of exclusive breastfeeding for the first six months. Traditional food taboos, such as avoiding specific fish or fruits for infants, have also been addressed through targeted community education, leading to broader acceptance of diverse foods.



A Village Health Assistant leads a Positive Deviant Hearth session under the BEAN project, guiding parents and caregivers to prepare nutritious meals that support the recovery of their undernourished children.

“Previously, mothers would leave their babies at three months to work in the garden. This practice has changed.”

– Village health assistant

Hygiene promotion has been a core component of the project's community outreach. To date, 132 VHAs, faith and community leaders have been trained to promote essential hygiene practices such as handwashing, safe water use, and sanitation. During the April–June 2024 floods, BEAN collaborated with local health centres and WASH actors to deliver emergency hygiene awareness campaigns and distribute hygiene tools. These efforts reached 1,648 direct beneficiaries and included demonstrations on safe water storage, jerry can distribution for people with disabilities, and guidance on hygienic food preparation.

PARTNERSHIPS DRIVING CHANGE

Strategic partnerships have been central to the BEAN project's reach, relevance, and sustainability. Key stakeholders, including the Community Development Office, Department of Agriculture and Livestock, Council of Women, Provincial Health Authority, and the Organisation for People with Disabilities, have played instrumental roles in co-delivering training, promoting inclusive practices, and advancing shared development goals.

"Logistics support from World Vision through the BEAN Project has been crucial in delivering community activities."

– Community development officer

Department of Agriculture and Livestock, Provincial Health Authority have delivered climate-smart agriculture and IYCF trainings, while the Organisation for People with Disabilities has advanced disability awareness and rights-based advocacy. The Delta Fly District Council of Women has actively engaged the project team through meetings and invitations to jointly coordinate key activities, including international day celebrations, district church conventions, and training sessions on gender equality, disability and social inclusion. Faith leaders and community leaders continue to amplify the project's reach through grassroots engagement.

"With the help of this training [gender-based violence], the district was able to establish an Organisation for People with Disabilities and Family Sexual Violence unit for survivors and increase awareness on family and sexual violence."

– Community development officer



The BEAN project equips parents with nutrition knowledge and tools to nourish their children.



Mailato, a lead farmer from Awaba village, shares how the BEAN Project helped her community diversify beyond sago, coconut, and fish by teaching about the different food groups.

PLANTING THE SEEDS FOR A BRIGHTER, HEALTHIER TOMORROW: ONE GARDEN AT A TIME

Mailato, a Gogodala woman from Awaba in Delta Fly District, is a Lead Farmer for BEAN's nutrition-sensitive agriculture. She says her community once relied on a limited number of staple foods, especially sago, which could not be harvested in the wet season. Children from poorer families in the area went hungry and skipped school, and community health in general declined during this time. On top of this, an over-reliance on sago without the addition of other nutrients was resulting in health issues, including stunted growth and impaired cognitive development in children.

After learning about climate-smart agricultural techniques and proper nutrition through the project, Mailato returned to her community to train fellow community members on what she had learned. She says: "I trained others and saw that they started to make gardens of their own to help their families, some of them for the first time. We are now seeing a very big change."

SUSTAINABILITY

The BEAN Project's midterm review found promising potential for long-term impact, particularly where strong local ownership, behaviour change, and institutional partnerships exist. IYCF practices are now embedded in community norms and supported by local champions. Climate-smart agriculture techniques and hygiene behaviours also show moderate to high sustainability, especially in areas with active NGO-government collaboration.

Community awareness of gender and disability inclusion is growing, though more structured leadership pathways are needed. Models such as Lead Farmers, VHAs, and male engagement in nutrition exhibit moderate sustainability but require further investment in institutional support and policy integration.

Savings groups, while valued, face low cash flow and market isolation, which may affect their long-term continuity. Market access and income diversification also show lower sustainability potential due to persistent transport barriers and weak buyer linkages. In the final years of the project, securing government co-ownership and resources will be critical to sustaining BEAN's current gains.

GENDER EQUALITY, DISABILITY AND SOCIAL INCLUSION

The BEAN project has taken intentional steps to support the meaningful participation of people with disabilities in savings groups, farming activities, and community development. Focus group discussions highlighted that people with disabilities contribute to income generation through small businesses and farming, while caregivers of children with disability report improved child nutrition and reduced stigma:

"We have two members with disabilities. We encourage them to participate in small businesses or fishing, and their families assist with savings."

– Savings Group (Men's FGD)

"Before, my child couldn't speak. Now, with better nutrition, he calls people by name. I feel more empowered now and no longer experience the same level of stigma."

– Caregiver of a child with disability

Gender norms are slowly shifting, with more women engaged as lead and contact farmers, and some men participating in nutrition, caregiving, and traditionally female activities. However, women still report unequal decision-making power and limited leadership roles. Cultural beliefs continue to exclude people with disabilities from leadership, with perceptions of ability used to justify exclusion.

Awareness training through faith and community leaders and the Celebrating Families model has supported improved community attitudes, increased shared household responsibilities, and reduced physical violence in some communities. However, emotional and financial abuse remain widespread, and formal support systems are weak.

"Emotional and physical violence are common, but gender awareness has helped reduce incidents."

– Faith Leader

CONCLUSIONS

The BEAN project has made encouraging progress in improving food security and nutrition across target communities, particularly for mothers and children under five. From a results-based perspective, most outputs are partially achieved, and the project is on a positive trajectory. Outcome 1 is largely on track, with key achievements in increased crop diversity and yields driven by the Lead Farmer model and enhanced household resilience through establishment of savings groups. Producer cooperative registration and building formal market systems require further progress and will take place in the final years.

Outcome 2 is on track, with IYCF practices now widely adopted and supported by stronger community engagement through Village Health Assistants. The VHA model is well embedded and effective in promoting health and nutrition at the local level. The project's inclusion efforts, particularly for people with disabilities, have begun to shift due to awareness and participation. Gender norms are gradually evolving, with increased community dialogue and engagement.

To achieve its full impact, the project must invest more strongly in sustainability measures, functional market linkages, and deeper government ownership and inclusion strategies. Prioritising these areas in the second half of implementation will be key to ensuring long-term viability and equitable outcomes.

RECOMMENDATIONS

OUTCOME 1

- Strengthen the Lead Farmer approach with standardised training modules, supervision protocols, and equitable SOPs for seed and tool distribution.
- Scale peer learning between farmer groups and enable Contact Farmers to transition into Lead Farmer roles.
- Prioritise the formation of producer cooperatives that will support develop localised market access strategies.
- Strengthen the participation of women and people with disabilities in value chains and income diversification.

OUTCOME 2

- Integrate VHAs into formal health systems with structured supervision, training, and incentives.
- Address ongoing cases of child malnutrition through emergency nutrition assessments, strengthened referral systems, and Positive Deviance Hearth model.
- Prioritise inclusive hygiene behaviour change, refresher training on IYCF, growth monitoring, and equitable food distribution.
- Scale the Celebrating Families model to all communities, promoting male engagement in caregiving and joint budgeting. Use local leaders to facilitate gender dialogues and introduce scorecards to track gender norm shifts.
- Strengthen child protection and GBV awareness via schools, churches, and community groups, and roll out safety plans to improve protection systems post-project.



Alphie stands in front of his sweet potato garden. Recently Alphie sold a bag of sweet potatoes from his garden and bought three fishing nets, he saves the money he earns from selling fish in his Savings for Nutrition (S4N) group.

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