

Implementation Status and Perceived Socioeconomic Effects of the Philippine Rural Development Project Across Three Assisted Enterprises in General Santos City

Maylene B. Bernaldez
Sultan Kudarat State University
bernaldezmaylene24@gmail.com

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ABSTRACT

This study assessed the implementation status and perceived socioeconomic effects of the Philippine Rural Development Project-Investments in Rural Enterprises and Agriculture and Fisheries Productivity (PRDP-I-REAP) sub-projects across three assisted enterprises in General Santos City. Using a quantitative descriptive design, data were gathered from 106 beneficiary members of the Tinagacan Agrarian Reform Beneficiaries Cooperative (TARBC), Sinawal Small Farmers Association (SSFA), and City Food Terminal Multi-Purpose Cooperative (CFTEMCO) through structured survey questionnaires. Descriptive statistics, weighted means, standard deviations, one-way ANOVA, Tukey HSD post hoc testing, and

weighted ranking of constraints were used to analyze implementation status, socioeconomic improvement, enterprise differences, and major challenges. Findings showed that PRDP-I-REAP sub-projects were implemented from moderate to high levels, with TARBC recording the highest overall implementation. ANOVA results indicated a significant difference in implementation levels across enterprises, $F = 5.1153$, $p = 0.0076$, particularly between TARBC and CFTEMCO. However, perceived socioeconomic improvement did not significantly differ across enterprises, $F = 1.862$, $p = 0.160$, and remained moderately satisfying in household income, productivity and output, and market access. Major challenges included climate variability, supply chain constraints, production quality issues, member participation gaps, governance concerns, and market linkage limitations. The study concludes that while PRDP-I-REAP generated measurable enterprise-level benefits, implementation quality alone did not automatically translate into transformative socioeconomic change. Differentiated support mechanisms, stronger market linkages, climate-resilient interventions, and post-project sustainability systems are recommended to improve long-term outcomes for smallholder farmers and assisted enterprises.

Keywords: *PRDP-I-REAP, implementation status, socioeconomic effects, assisted enterprises, General Santos City, rural enterprise development*

INTRODUCTION

Agriculture and fisheries remain central to the Philippine economy because they support food security, employment, and rural livelihoods. Despite this importance, smallholder farmers and fisherfolk continue to face persistent constraints such as low productivity, weak market access, insufficient postharvest facilities, limited technology adoption, and increasing exposure to climate-related risks (Department of Agriculture [DA], 2023; Philippine Statistics Authority [PSA], 2024). These conditions make rural

development programs important policy instruments for improving income, strengthening local enterprises, and promoting inclusive growth.

The Philippine Rural Development Project (PRDP), implemented by the Department of Agriculture with World Bank support, was designed to modernize the agriculture and fisheries sector through value-chain-oriented and climate-resilient interventions. It operates through four components: I-PLAN for planning and investment programming, I-BUILD for infrastructure, I-REAP for rural enterprise development, and I-SUPPORT for technical assistance and monitoring. The I-REAP component directly assists cooperatives and associations by providing enterprise funding, infrastructure support, equipment, training, and market linkage assistance (DA-PRDP, 2022).

In General Santos City, PRDP-I-REAP supported three enterprise-based sub-projects aligned with the city commodity investment priorities for coconut and mango. TARBC implements coconut consolidation, processing, and marketing; SSFA manages a coconut syrup processing and marketing enterprise; and CFTEMCO undertakes fresh mango production, consolidation, and marketing. These interventions were intended to improve household income, productivity, market access, cooperative governance, and participation in competitive value chains.

Although PRDP interventions have promising objectives, localized empirical evidence is needed to determine how implementation translates into socioeconomic outcomes among enterprise members. National and regional reports often focus on program outputs, infrastructure counts, or broad income changes, while less attention is given to enterprise-level implementation, member perceptions, and differentiated challenges faced by assisted cooperatives and associations. This study therefore assessed the implementation status and perceived socioeconomic effects of PRDP-I-REAP sub-projects across TARBC, SSFA, and CFTEMCO in General Santos City. Specifically, it described beneficiary profiles, measured implementation status and socioeconomic improvement, tested differences across enterprises, and identified challenges affecting implementation, management, and sustainability.

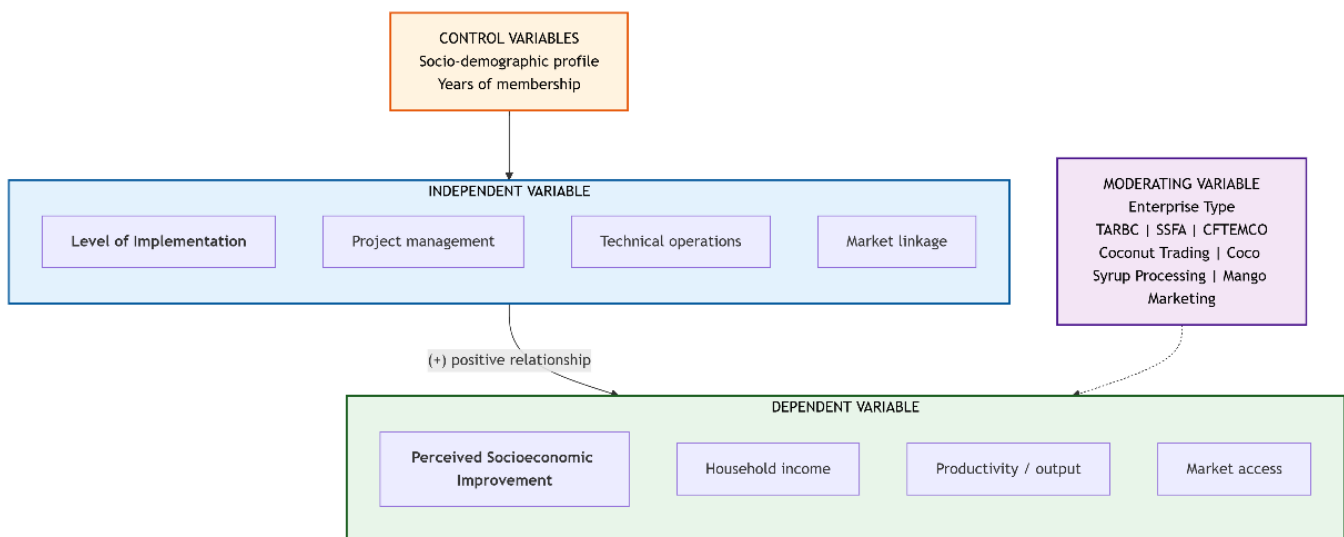


Figure 1. *Conceptual Framework of the Study*

Literature Review

Theoretical foundations of rural development

Rural development involves improving the economic, social, and institutional conditions of rural communities. The Sustainable Livelihoods Framework explains that household resilience depends on the interaction of human, social, natural, physical, and financial assets (Department for International Development [DFID], 2000). PRDP-I-REAP aligns with this view by providing enterprise support, training, and market-oriented assistance intended to improve income, productivity, and market access.

Institutional Development Theory emphasizes the importance of governance, transparency, accountability, and collective action in sustaining development outcomes (North, 1991; Ostrom, 2010). In cooperative-based enterprises, strong governance and active member participation are necessary for project resources to become sustainable livelihood gains. The Participatory Development Approach also stresses that development interventions become more relevant and sustainable when members and stakeholders are engaged in implementation and assessment (Chambers, 2017).

PRDP and rural enterprise development

Rural development programs have shifted from production-centered assistance toward integrated value-chain and enterprise-driven strategies. The Food and Agriculture Organization (2021) and World Bank (2022) emphasize strategies that combine infrastructure, market participation, technology adoption, and institutional capacity building. In the Philippine setting, PRDP supports this direction by improving agricultural planning, infrastructure, enterprise development, and project monitoring through its component structure (DA, 2021).

Several studies have reported positive effects of PRDP and similar enterprise interventions. Pilar (2022) documented improvements in market access and income among PRDP-assisted enterprises, while Santos and Rivera (2023) observed income gains among Mindanao beneficiaries. Lopez et al. (2023) further emphasized the role of PRDP interventions in strengthening climate-resilient livelihoods. However, DA-PRDP (2023) also noted persistent issues such as procurement delays, uneven participation, and weak post-project sustainability mechanisms. These findings suggest that the success of PRDP depends not only on project funding but also on cooperative governance, technical capacity, market linkage, and member participation.

Cooperatives, socioeconomic outcomes, and implementation challenges

Cooperatives and associations provide platforms for collective marketing, input access, credit facilitation, and value-added enterprise development. Birchall (2014) argued that cooperatives strengthen members' bargaining power and democratic participation, while the Cooperative Development Authority (2022) recognizes them as important actors in agricultural modernization. In Mindanao, Delgado (2022) and Panganiban and Diaz (2023) found that cooperative performance is strengthened by stable leadership, transparent financial controls, and participatory governance.

Socioeconomic impacts of development projects are commonly reflected in income, productivity, employment, market participation, and community empowerment (FAO, 2019). Studies in the Philippines show that agri-value chain participation can improve farm-gate prices, product quality, and market access, yet these gains depend on the capacity of cooperatives to meet buyer requirements and sustain operations (Garcia & Roxas, 2023; Rivera, 2023). Implementation challenges such as climate variability, market volatility, high input costs, leadership turnover, and limited post-project support may weaken long-term benefits (OECD, 2021; Tolentino, 2017). These gaps support the need to evaluate PRDP-I-REAP implementation and socioeconomic outcomes at the enterprise level.

METHODS

Research Design

The study employed a quantitative descriptive research design to assess the implementation status and perceived socioeconomic effects of PRDP-I-REAP sub-projects in General Santos City. This design was appropriate because the study measured and described beneficiary characteristics, implementation dimensions, perceived socioeconomic outcomes, and challenges using standardized survey data. It also used inferential analysis to determine whether implementation status and socioeconomic improvement differed across the three assisted enterprises (Creswell, 2014).

Research Locale

The study was conducted in General Santos City, Region XII, Philippines. The locale included the operating areas of three PRDP-I-REAP assisted enterprises: TARBC, which is engaged in coconut production, consolidation, processing, and trading; SSFA, which is involved in coconut syrup processing and marketing; and CFTEMCO, which focuses on mango production, consolidation, and marketing.

Participants and Sampling Technique

The respondents were 106 beneficiary members selected from the three assisted enterprises through stratified random sampling to ensure representation across enterprise groups. The sampling frame was based on official membership lists: TARBC with 464 members, CFTEMCO with 364 members, and SSFA with 84 members. Only members who had participated in PRDP-supported activities for at least one year were included to ensure adequate exposure to project implementation.

Research Instrument

A structured survey questionnaire served as the main instrument. It included sections on socio-demographic profile, livelihood and production characteristics, level of implementation, perceived socioeconomic effects, and implementation challenges. Implementation status was measured across project management, technical and enterprise operations, and market linkage development. Perceived socioeconomic improvement was measured through household income, productivity and output, and market access. A five-point Likert scale was used for implementation and socioeconomic effect indicators, while challenges were assessed using a weighted ranking method.

Data Gathering Procedure

The researcher secured permission from the City Agriculturist's Office of General Santos City and from the management and boards of TARBC, SSFA, and CFTEMCO. Before survey administration, the respondents were oriented on the purpose of the study, voluntary participation, confidentiality, and proper completion of the questionnaire. Surveys were administered during enterprise meetings, group sessions, or scheduled individual appointments. Completed questionnaires were checked for completeness, encoded, and secured for analysis.

Data Analysis

Frequency, percentage, mean, and standard deviation were used to describe respondent profiles and summarize implementation and socioeconomic improvement. Weighted means were interpreted using the five-point scales provided in the study. One-way ANOVA tested differences in implementation status and perceived socioeconomic improvement across enterprises, while Tukey HSD post hoc testing identified specific enterprise pairs with significant differences. Weighted ranking was used to identify the most critical challenges. The significance level was set at $\alpha = 0.05$.

Ethical Consideration

The study followed ethical standards for research involving human participants. Participation was voluntary, and respondents were informed of their right to withdraw without consequence. Survey forms did not require identifying information. Data were stored securely and reported only in aggregate form to protect confidentiality. The study also promoted equity by including men and women, farmers of different age groups, and members from the barangays served by each enterprise.

RESULTS AND DISCUSSION

Socio-demographic Profile of Beneficiaries

Table 1. *Socio-demographic Profile of Beneficiaries*

Indicator	CFTEMCO (n=36)	TARBC (n=45)	SSFA (n=25)
Sex (M/F)	15 / 21	23 / 22	18 / 7
Mean age	48.7 years	54.4 years	50.0 years
Married respondents	52.8%	71.1%	76.0%
Elementary education	11.1%	20.0%	28.0%
High school education	33.3%	33.3%	40.0%
College education	44.4%	35.6%	20.0%
Mean years in farming	13.2 years	26.3 years	25.6 years
Income below PHP 10,000	47.2%	46.7%	36.0%
Income PHP 10,001-20,000	25.0%	42.2%	52.0%
Main PRDP activity	Consolidation / marketing	Equipment use / consolidation	Processing / marketing

The beneficiaries were predominantly middle-aged to older farmers with long farming experience and generally low household income. TARBC members had the longest farming experience, while CFTEMCO had the highest proportion of female and college-educated members. The profile confirms that PRDP-I-REAP beneficiaries are mostly smallholder producers whose livelihood conditions remain vulnerable. It also shows that enterprise type shaped participation: CFTEMCO members were more engaged in consolidation and marketing, TARBC in equipment use and consolidation, and SSFA in processing and marketing.

Implementation Status of PRDP-I-REAP Sub-projects

Table 2. *Level of Implementation per Enterprise and Dimension*

Dimension	CFTEMCO Mean (SD)	Interpretation	TARBC Mean (SD)	Interpretation	SSFA Mean (SD)	Interpretation
Project management	3.61 (0.38)	Highly implemented	3.96 (0.68)	Highly implemented	3.67 (0.57)	Highly implemented
Technical and enterprise operations	3.35 (0.22)	Moderately implemented	3.71 (0.48)	Highly implemented	3.74 (0.49)	Highly implemented
Market linkage development	3.28 (0.56)	Moderately implemented	3.64 (0.94)	Highly implemented	3.30 (0.68)	Moderately implemented
Overall implementation	3.41 (0.19)	Moderately implemented	3.77 (0.67)	Highly implemented	3.57 (0.55)	Highly implemented

Implementation status ranged from moderate to high across the enterprises. TARBC obtained the highest overall implementation mean, particularly in project management and market linkage development.

CFTEMCO and SSFA showed weaker ratings in market linkage development, suggesting that buyer relationships, price stability, and market access remain difficult to sustain. These findings support Institutional Development Theory, which emphasizes that governance, role clarity, and organizational capacity shape project success (North, 1991; Ostrom, 2010).

Perceived Socioeconomic Improvement

Table 3. *Perceived Socioeconomic Improvement per Enterprise and Dimension*

Dimension	CFTEMCO Mean (SD)	Interpretation	TARBC Mean (SD)	Interpretation	SSFA Mean (SD)	Interpretation
Household income	3.32 (0.40)	Moderately satisfied	3.12 (1.13)	Moderately satisfied	2.99 (0.99)	Moderately satisfied
Productivity and output	3.18 (0.51)	Moderately satisfied	3.34 (1.40)	Moderately satisfied	3.12 (1.30)	Moderately satisfied
Market access	3.13 (0.40)	Moderately satisfied	3.32 (1.60)	Moderately satisfied	3.31 (1.59)	Moderately satisfied
Overall socioeconomic improvement	3.21 (0.41)	Moderately satisfied	3.26 (1.32)	Moderately satisfied	3.14 (1.23)	Moderately satisfied

All three enterprises reported moderately satisfied levels of socioeconomic improvement. TARBC had the highest overall mean, while SSFA had the lowest household income score. No enterprise reached the highly satisfied level, indicating that PRDP-I-REAP produced positive but not yet transformative changes. In terms of the Sustainable Livelihoods Framework, the interventions improved livelihood assets, but these gains remained constrained by vulnerability contexts such as climate risks, unstable prices, and uneven institutional capacity (DFID, 2000).

Differences in Implementation Levels Across Enterprises

Table 4. *One-Way ANOVA Results for Implementation Across Enterprises*

Source	df	Sum of Squares	Mean Square	F	p-value
Between groups	2	2.6114	1.3057	5.1153	0.007572
Within groups	106	27.0571	0.2553		
Total	108	29.6685	0.2747		

Table 5. *Tukey HSD Post Hoc Comparisons for Implementation*

Pair	Difference	SE	Q-value	95% CI Lower	95% CI Upper	p-value
TARBC vs. CFTEMCO	0.3549	0.0789	4.4981	0.0897	0.6201	0.0054
TARBC vs. SSFA	0.1583	0.0914	1.7318	-0.1490	0.4657	0.4414
CFTEMCO vs. SSFA	0.1965	0.0877	2.2422	-0.0981	0.4912	0.2564

The ANOVA revealed a statistically significant difference in implementation levels across enterprises, $F = 5.1153$, $p = 0.007572$. Thus, the null hypothesis stating that no significant difference exists in implementation levels was rejected. Tukey HSD results showed that TARBC had significantly higher implementation than CFTEMCO. This confirms that enterprise type influenced implementation outcomes, with the coconut consolidation and trading enterprise performing better than the mango production and marketing enterprise.

Differences in Perceived Socioeconomic Improvement Across Enterprises

Table 6. ANOVA Results for Socioeconomic Improvement Across Enterprises

Source	Sum of Squares	df	Mean Square	F	p-value
Between groups	3.807	2	1.904	1.862	0.160
Within groups	105.305	103	1.022		
Total	109.112	105			

The ANOVA result for socioeconomic improvement was not significant, $F = 1.862$, $p = 0.160$. Therefore, the null hypothesis was accepted. This means that, despite differences in implementation status, perceived socioeconomic improvement did not significantly vary across TARBC, SSFA, and CFTEMCO. This finding suggests that implementation quality alone does not guarantee strong socioeconomic transformation. External factors such as climate variability, market volatility, production costs, and household-level differences may influence how project benefits are experienced by members.

Challenges and Constraints in Implementation, Management, and Sustainability

Table 7. Most Critical Challenges by Assisted Enterprise

Rank	TARBC	SSFA	CFTEMCO
1	Climate change and natural disasters	Member participation and engagement	Supply chain and input access
2	Supply chain and input access	Leadership and governance issues	Production and processing quality
3	Production and processing quality	Compliance and documentation	Climate change and natural disasters
4	Capacity building and training	Financial management	Market access and buyer relationships
5	Scaling and expansion	Capacity building and training	Leadership and governance issues

The constraint rankings revealed that challenges were enterprise-specific. TARBC was most affected by climate and natural disaster risks, which threaten coconut production volume and supply reliability. SSFA was most constrained by low member participation, leadership instability, documentation requirements, and financial management concerns. CFTEMCO faced supply chain and input access problems, production quality issues, climate risks, and weak market access. Across enterprises, climate variability, supply chain limitations, product quality concerns, member engagement gaps, and governance issues emerged as recurring constraints.

These findings are consistent with the literature on rural enterprise implementation, which identifies market volatility, weak buyer commitments, leadership turnover, uneven member participation, and limited sustainability mechanisms as common barriers to cooperative performance (DA-PRDP, 2023; Delgado, 2022; Rivera, 2023). The results also validate the conceptual framework by showing that enterprise type moderates not only implementation outcomes but also the nature of operational challenges.

CONCLUSION

The study concludes that PRDP-I-REAP beneficiaries in General Santos City are largely aging smallholder farmers with long farming experience, low monthly income, and varying levels of education and enterprise participation. Their profiles show that the assisted enterprises serve vulnerable rural

producers who require continued institutional and technical support to achieve stronger livelihood outcomes.

The implementation of PRDP-I-REAP sub-projects ranged from moderate to high, with TARBC recording the highest overall implementation. The significant difference in implementation levels across enterprises indicates that enterprise type, organizational maturity, and governance capacity affect how PRDP support is carried out. However, socioeconomic improvement remained only moderately satisfying across all enterprises and did not significantly differ by enterprise type. This suggests that project implementation, although necessary, is not sufficient by itself to produce transformative livelihood change.

The study further concludes that the relationship between implementation and socioeconomic outcomes is shaped by external and internal constraints. Climate variability, supply chain problems, weak market access, governance issues, low member participation, documentation burdens, and limited financial management capacity restrict the full realization of PRDP benefits. Therefore, more differentiated, enterprise-specific, and sustainability-oriented interventions are needed to convert moderate gains into long-term improvements in income, productivity, market access, and enterprise resilience.

Recommendation

1. Strengthen enterprise governance and member participation by institutionalizing governance manuals, leadership succession plans, performance-based participation incentives, and regular capacity building in financial management, documentation, and cooperative leadership.

2. Enhance technical capacity and enterprise operations by providing post-project equipment maintenance support, training local technicians, improving quality assurance systems, and scheduling training activities in ways that do not conflict with members' farm work.

3. Improve market access and buyer linkages by requiring formal buyer agreements, diversifying buyer portfolios, strengthening digital and institutional marketing platforms, and facilitating business-to-business matching through the DA and LGU.

4. Address climate and supply chain vulnerabilities by integrating climate-resilient agricultural practices, weather-based risk management, crop diversification, bulk input purchasing, member clustering, and production scheduling into PRDP and LGU support programs.

5. Ensure post-project financial sustainability by establishing sustainability funds for scaling, equipment replacement, and emergency support, and by allocating dedicated LGU budgets for post-PRDP extension, market matching, and quality certification assistance.

6. Tailor interventions according to enterprise type. Processing enterprises such as SSFA require intensive governance and technical support; marketing enterprises such as CFTEMCO need buyer diversification and postharvest infrastructure; and consolidation enterprises such as TARBC need supply chain strengthening and climate resilience support.

7. Future studies should conduct cost-benefit analysis, longitudinal tracking, comparative analysis between PRDP-assisted and non-assisted enterprises, and multivariate modeling to examine how age, gender, education, membership duration, and enterprise type influence implementation and socioeconomic outcomes.

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