

# Needs Assessment of the 4Ps Beneficiaries: Basis for a Livelihood Project for Dingalan, Aurora

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# Abstract

The Pantawid Pamilyang Pilipino Program (4Ps) beneficiaries' needs have been assessed to determine the kind of livelihood training to be provided to them by the College of Education, Bachelor of Science in Industrial Education. The profile of the beneficiaries has been identified. Most of their livelihood is in planting crops/agriculture; they live in semi-concreted houses, with common medical conditions of colds/flu/fever. Most of the parents are graduates of elementary and secondary education. Their children are in basic education at the moment. The monthly income of the beneficiaries falls within Php 15,000 and above. They belong to the Tagalog and Aeta/Dumagat/ Agta ethnicity. They have received financial assistance from the local government of Dingalan, Aurora, in the form of Quantitative and qualitative methods have been utilized to determine the assessment needs of 4Ps beneficiaries. The 4Ps beneficiaries agreed that they are satisfied with their present means of living. Nevertheless, according to the Honorable Mayor, Shierwin Halili Taay, they are looking for more ways to provide opportunities for these people to augment their means of living, which is one of the top priority programs of the municipality. Likewise, they agreed that they need additional income to sustain the family's needs for necessities such as food, clothing, medicine, water, shelter, and, most of all, for their children's education. Furthermore, the 4Ps beneficiaries agreed that they are willing to undergo livelihood training to augment the family's income. From among the livelihood training programs, the 4Ps beneficiaries prefer coco-based production aside from Pananahi (sewing); Pagluluto ng iba't-ibang ulam (cooking) Pagwewelding; Basic electrical installation; Pagtitinggal ng pagkain (food preservation); and Coco-based production. It is then recommended that other departments/colleges at NEUST be engaged to cater to the medical/dental needs and nutrition and dietetics of the 4Ps beneficiaries. Strong collaboration with LGU Dingalan should be sustained to respond to the livelihood training needs of the people continuously.

#### **Subject Areas**

Education, Good Governance, Sociology, Psychology

#### **Keywords**

4Ps (Pantawid Pamilyang Pilipino Program), Coco-Based Production, Livelihood Program, Aeta, Agta, Ethnic Groups

# **1. Introduction**

The Pantawid Pamilyang Pilipino Program (4Ps) is a human development initiative by the Philippine government aimed at reducing poverty by providing conditional cash grants to the poorest families. This program is designed to improve the health, nutrition, and education of children aged 0 - 18. It is inspired by similar conditional cash transfer (CCT) schemes in Latin America and Africa, which have been successful in lifting millions out of poverty, according to Jacopo Gamba, 2021 [1], Conditional Cash Transfers in Latin America) and in the ELLA Area: Economic Development|ELLA THEME: CONDITIONAL CASH TRANSFERS [2].

The Department of Social Welfare and Development (DSWD) [3] leads the 4Ps, focusing on both immediate social assistance and long-term social development goals. These goals include health check-ups for pregnant women and children aged 0 to 5, deworming for schoolchildren aged 6 to 14, and ensuring enrollment in daycare, elementary, and secondary education, which can be found in the FAQs about the Pantawid Pamilyang Pilipino Program (4Ps) [4] (July 10, 2017).

The 4Ps program was institutionalized through the Philippine Republic Act 11310 during Benigno C. Aquino's administration [5], emphasizing the government's commitment to poverty alleviation and human development as stipulated in the Philippine Department of Social Welfare and Development (October 30, 2021) and in the Human Development and Poverty Alleviation [6], during the administration of Benigno C. Aquino, Jr. (2013).

The program targets the poorest municipalities based on Small Area Estimates (SAE) and aims to increase compliance with health and nutrition conditions to 97%, among other objectives, according to the Department of Social Welfare and Development (October 30, 2021). It has been reported that the program has contributed to a 1.4 percentage point annual reduction in poverty, translating to 1.5 million fewer poor Filipinos (FAQs about the Pantawid Pamilyang Pilipino Program (4Ps), July 10, 2017).

With around 4,400,000 household beneficiaries, the 4Ps is one of the world's

largest CCT programs in terms of population coverage (FAQs about the Pantawid Pamilyang Pilipino Program (4Ps), July 10, 2017) and (4Ps program aids family-beneficiaries to be self-sufficient, according to Cudis, Christine [7] (2022).

Funding for the 4Ps comes from public sources, as outlined in the 2022 National Expenditure Program, with a total cost of 107,084,000,000 Philippine pesos, according to the Department of Social Welfare and Development reports [8] (October 30, 2021).

The program's effectiveness in improving the health, education, and overall well-being of children and pregnant women in beneficiary families has been confirmed through various impact evaluations as manifested in the IMPACT EVALUATION OF THE PANTAWID PAMILYANG PILIPINO PROGRAM, Third Wave Impact Evaluation of Pantawid: Further Analysis [9], and sustained by the Expanded Social Assistance Project: Report and Recommendation of the former President, Benigno C. Aquino, Jr. [10].

However, the success of the 4Ps in reducing poverty and its long-term impacts on beneficiaries' self-sufficiency and economic status requires continuous monitoring and critical examination based on the FOLLOW-UP ON THE PERFOR-MANCE AUDIT ON THE PANTAWID PAMILYANG PILIPINO PROGRAM [11] (2022).

In summary, the Pantawid Pamilyang Pilipino Program represents a significant effort by the Philippine government to address poverty through a comprehensive approach that includes both immediate financial assistance and investments in human capital development. Its design and implementation draw on the experiences of CCT programs globally, with a focus on achieving measurable improvements in the health and education of the country's poorest populations as supported by FAQs about the Pantawid Pamilyang Pilipino Program (4Ps) (July 10, 2017), and the Department of Social Welfare and Development (October 30, 2021).

# 2. Statement of the Problem

This action research aims to assess the livelihood preferences of the 4Ps Beneficiaries in Dingalan, Aurora, particularly the parents of the currently enrolled learners at Cabog Integrated School.

Specifically, this action research shall aim to answer the following questions:

- 1) How may the profile of the 4Ps be described in terms of:
- a) Age;
- b) Gender;
- c) Marital Status;
- d) Residence type;
- e) Means of living;
- f) Medical record;
- g) Number of school-age children;

- h) Highest educational attainment;
- i) Monthly income; and
- j) Ethnicity?
- 2) Are you satisfied with your present means of living?
- 3) Would you like to have additional income for the family?
- 4) Are you willing to undergo livelihood training?
- 5) What livelihood program would you like to venture to?

6) What proposed livelihood training projects may be organized for the 4Ps beneficiaries?

# 3. Methods and Procedures

Quantitative and qualitative methods were used to solicit the responses of the respondents.

Fellows and Liu [12] (2008) said that quantitative research methods are usually adopted because they are scientific methods and provide immediate results. Another reason behind selecting this approach is that it is more efficient, can test hypotheses, and always targets clarifying features, matters them, and builds statistical models to describe what is discovered during research. According to Matthews & Ross (2010) [13], quantitative research methods are fundamentally focused on collecting data set up, and that could be displayed numerically. Generally, quantitative data is accumulated when a researcher has followed the positivist epistemological way, and data that may be scientifically analyzed is collected.

Qualitative research is a scientific method of observation to gather non-numerical data. This type of research "refers to the meanings, concepts, definitions, characteristics, metaphors, symbols, and description of things" and not to their "counts or measures."

Qualitative research is mainly found in disciplines where the target is on reason and information, such as sociology, interpersonal anthropology, and psychology, rather than on predictions (Hakim, 2000) [14]. Bryman and Bell [15] (2007) explained that qualitative research is a study strategy that implies the relationship between theory and research and usually emphasizes how theories were made. As a research strategy, qualitative research is inductivist, constructionist, and interpretivist, but qualitative researchers do not always subscribe to all three of these methods.

This was supported by the respondents' actual interviews to get the information needed for the study. The interview is structured so that questions are carefully prepared (translated in the local dialect) to suit the needs of the respondents.

### 4. Results and Discussions

The following tables show the survey results regarding the livelihood needs assessment of the 4Ps beneficiaries in Dingalan, Aurora. 1) Profile of the 4Ps beneficiaries

The survey results presented in **Table 1** illuminate the age distribution of parent beneficiaries of the 4Ps program in Dingalan, Aurora. This distribution is critical for understanding the demographic profile of families benefiting from the program and provides insights into the lifecycle stage of these households. The data indicates a concentration of parents in the middle-age brackets, with the highest proportion (28%) in the 35 - 39 age group, followed by significant representations in the 30 - 34 and 40 - 44 age brackets (each accounting for 20% of the total).

This predominance of middle-aged parents suggests that a substantial portion of 4Ps beneficiaries are at a life stage characterized by stable family structures and potentially higher financial responsibilities, including the upbringing of children and possibly caring for elderly family members. The presence of younger parents (20 - 24 years old) and older parents (50 years and above) at the lower end of the distribution (each group constituting 4% of the total) highlights the diversity of the program's reach, touching upon families at various stages of the family lifecycle.

The implications of this age distribution extend beyond mere demographics. For younger parents, the program may provide crucial financial support during the early stages of family formation and child-rearing, potentially easing the economic pressures associated with parenting. On the other hand, for middle-aged parents, the program's support might be instrumental in securing educational opportunities for their children, thereby investing in the human capital of the next generation. For the older age group, the program could offer a form of social protection, reducing vulnerability to poverty and fostering resilience against economic shocks.

Moreover, the age diversity of the 4Ps beneficiaries' parents suggests that the program's impact is broad, addressing the needs of families across different life stages. This distribution underscores the importance of tailoring program interventions to the varying needs of beneficiary households, possibly incorporating age-specific support mechanisms to enhance the program's effectiveness in promoting socio-economic development.

Frequency	Rate
10	4%
30	12%
50	20%
70	28%
50	20%
30	12%
10	4%
250	100%
	10 30 50 70 50 30 10

Table 1. Age of parent beneficiaries.

In conclusion, the age profile of the 4Ps beneficiaries' parents in Dingalan, Aurora, not only reflects a wide range of life stages but also hints at the program's role in providing timely support to families. By focusing on the middle-aged majority while not neglecting the unique needs of younger and older parents, the 4Ps program can continue to make significant strides in improving the livelihoods of marginalized populations in the Philippines. This analysis underscores the need for continuous assessment and adjustment of program strategies to accommodate the dynamic and diverse needs of its beneficiaries.

**Table 2** provides a detailed look into the age demographics of children beneficiaries under the 4Ps program, revealing significant insights into the educational landscape and developmental stages of these children. The distribution shows a concentration of beneficiaries within the 10 - 19 age range, which encompasses 71.42% of the children, split evenly between the 10 - 14 and 15 - 19 age groups (each at 35.71%). This significant representation indicates that the bulk of the program's child beneficiaries are in critical educational phases: late primary to high school.

The 21.43% of children aged 5 - 9 represent those in the early stages of formal education, highlighting the program's reach in supporting foundational learning. This early intervention is crucial, as it sets the stage for lifelong learning and development. The support for this age group likely facilitates access to educational opportunities, which might be hampered by socio-economic constraints.

Conversely, the smallest group, those aged 20 and above, constitutes 7.14% of the beneficiaries. This segment, while smaller, underscores the program's extension to support individuals potentially in tertiary education or vocational training. This indicates a commitment to fostering continued educational engagement beyond the compulsory schooling age, providing a pathway to higher education and improved livelihood opportunities for marginalized youth.

The predominance of beneficiaries in the basic education age range (10 - 19 years) emphasizes the critical role of the 4Ps program in supporting education continuity from primary to secondary levels. This support is essential for reducing dropout rates and encouraging the completion of secondary education, which is pivotal for breaking the cycle of poverty. Education at these levels equips children with fundamental skills and knowledge, preparing them for higher education, vocational training, or entry into the workforce.

Age	Frequency	Rate
5 - 9	30	21.43%
10 - 14	50	35.71%
15 - 19	50	35.71%
20 and above	10	7.14%
Total	140	100%

Table 2. Age of	children's	beneficiaries.
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Furthermore, the age distribution suggests that the program effectively targets the educational needs of children at various developmental stages. However, it also highlights the importance of tailored interventions that address the unique challenges faced by children as they transition through different educational levels. For instance, adolescents (15 - 19) may require targeted support to address barriers to high school completion, such as academic challenges, peer pressure, and the need for career guidance.

In conclusion, the age distribution of the 4Ps children beneficiaries in Dingalan, Aurora, not only reflects the program's broad educational impact but also its potential to contribute to human capital development by supporting beneficiaries across a continuum of learning stages. This analysis suggests a need for adaptive program strategies that cater to the evolving educational and developmental needs of children and adolescents, thereby enhancing the program's efficacy in promoting educational attainment and socio-economic upliftment for marginalized families.

**Table 3** reveals a noteworthy gender distribution among the child beneficiaries of the 4Ps program, with females comprising 57.14% and males 42.86% of the total. This distribution is significant, not only in highlighting the numerical dominance of female beneficiaries but also in what it suggests about gender dynamics within the context of social welfare and educational support programs.

The higher proportion of female beneficiaries could be reflective of several underlying factors. Firstly, it may indicate a successful outreach and enrollment strategy by the 4Ps program that effectively engages girls, who are often at risk of educational marginalization due to socio-economic barriers, cultural practices, or both. Historically, girls in many contexts face higher risks of dropping out of school due to factors such as poverty, societal expectations, and early marriage. The program's apparent effectiveness in supporting female education can be seen as a positive step towards gender equity in access to education.

Secondly, this gender disparity might also reflect a deliberate policy effort to empower females through education, acknowledging the transformative impact that educated women can have on their families and communities. Education for girls is widely recognized for its multiplier effects, including delayed marriage, reduced fertility rates, improved family health, and increased economic productivity.

However, the disparity also calls for a nuanced analysis of the program's reach and impact on male beneficiaries. The lower proportion of males in the program

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Table 3. Gender of children's beneficiaries.

Gender	Frequency	Rate
Male	60	42.86%
Female	80	57.14%
Total	140	100%

might raise questions about the barriers that prevent boys from accessing or benefiting from the program at the same rate as girls. It could point towards gender-specific challenges that boys face, such as higher pressure to engage in work or other activities that contribute to household income, thereby detracting from their educational engagement.

In addressing these gender dynamics, it is crucial for program implementers and policymakers to consider targeted interventions that address the specific needs and challenges faced by both genders. This could involve strengthening community engagement and awareness campaigns to promote the value of education for all children, implementing gender-sensitive approaches to program design and delivery, and providing support services that address the unique barriers to education faced by boys and girls.

Moreover, the insights from this gender distribution data should inform continuous monitoring and evaluation efforts, ensuring that the program remains responsive to the evolving needs of its beneficiaries. By doing so, the 4Ps program can enhance its role as a catalyst for gender-inclusive development, promoting equal opportunities for all children to achieve their educational and developmental potential.

**Table 4** provides a compelling snapshot of the marital status of parents participating in the 4Ps program, revealing a diverse array of family structures among the beneficiaries. With 46.67% of parents reported as married, this group forms the majority, reflecting traditional familial norms that are prevalent in Filipino society, where marriage is often seen as the foundation of family life. This is closely aligned with the Philippines' strong Christian values, which emphasize marriage as a key institution.

However, the significant proportion of separated parents, constituting 33.33% of the sample, highlights the complexities and challenges faced by many families within the program. This high rate of separation could indicate socio-economic pressures that strain family relationships, leading to separations. It may also reflect broader social changes affecting family structures, necessitating a closer examination of how social welfare programs like the 4Ps can best support families experiencing such transitions.

Status	Frequency	Rate
Single	10	6.67%
Married	70	46.67%
Widowed	10	6.67%
Separated	50	33.33%
Registered Partnership	10	6.67%
Total	150	100%

Table 4. Marital status of the parents.

The data also shows that single, widowed, and those in registered partnerships each account for 6.67% of the parent population, underscoring the program's reach among a wide range of family situations. This diversity in family structures points to the importance of tailoring program support to meet the varied needs of beneficiaries effectively. For instance, single and widowed parents may face different challenges compared to married or separated individuals, such as the need for stronger social support networks and access to childcare services to enable their participation in employment or training opportunities.

The findings from **Table 4** suggest several key considerations for policymakers and program implementers:

1) Targeted Support: Recognizing the specific needs and challenges associated with different marital statuses can inform more targeted interventions. For separated families, this might involve mediation services or counseling to support parental cooperation in child rearing and education.

2) Inclusive Design: The program must ensure that its design and delivery are inclusive, offering access and support to all family types without bias or discrimination. This inclusivity is crucial for ensuring that the benefits of the program reach all children, regardless of their parent's marital status.

3) Societal Engagement: The high rate of separation among beneficiaries indicates a need for broader societal engagement and support services to address the root causes of family breakdowns. This could include community-based initiatives aimed at strengthening family relationships and providing support for families in crisis.

In conclusion, the marital status data of 4Ps beneficiaries' parents in Dingalan, Aurora, not only reflects the program's broad demographic reach but also underscores the necessity for a nuanced understanding of family dynamics in social welfare programming. By acknowledging and addressing the diverse needs of families with different marital statuses, the 4Ps program can enhance its effectiveness in supporting the holistic well-being and socio-economic upliftment of marginalized communities.

Integrating the insights from the residence type data of 4Ps beneficiaries in Dingalan, Aurora, into the planning of a livelihood project offers a nuanced understanding of the community's living conditions and their implications for economic and social well-being. The prevalence of semi-concreted houses, which make up 32.26% of beneficiaries' homes, indicates a reliance on partially durable materials that might not fully protect against environmental hazards. This situation reflects moderate economic constraints and underscores the potential for livelihood projects to focus on skill development in construction and home improvement. Such initiatives could not only enhance living conditions but also equip individuals with marketable skills, promoting local employment opportunities (See Table 5).

The finding that 29.03% of beneficiaries own their homes suggests a degree of stability; however, the range of dwelling types, from nipa huts to concreted structures, indicates diverse levels of security and comfort. Livelihood projects

Residence Type	Frequency	Rate
Shanty	10	3.22%
Nipa hut	30	9.68%
Semi-concreted	100	32.26%
Concreted	70	22.58%
Owned	90	29.03%
Rented	10	3.22%
Total	310	100%

Table 5. Residence type.

can support economic empowerment through property ownership by offering financial literacy training, savings programs, and microfinance initiatives aimed at helping families invest in their homes. This approach would improve physical living conditions and foster a deeper sense of community investment and security.

Moreover, the small but significant portions of the population living in shanties and rented accommodations highlight a group that may face greater vulnerabilities. Addressing the needs of these families through rental assistance, legal aid for secure tenancy, and support for transitioning to more stable housing could mitigate some of the economic and environmental risks they face.

Leveraging housing for economic development presents another opportunity. With a substantial number of beneficiaries in owned and semi-concreted homes, there is potential to promote home-based enterprises, community cooperatives, and agricultural projects that utilize available space. This strategy not only empowers beneficiaries to generate income from their living environments but also fosters economic resilience and community development.

Finally, community-based approaches to infrastructure improvement can significantly enhance living conditions while promoting economic activities. Engaging beneficiaries in projects to improve roads, water sources, and electrification can foster a sense of community spirit, improve access to markets, and attract further investment into the area.

In conclusion, the residence type data from Dingalan, Aurora's 4Ps beneficiaries, underscores the need for livelihood projects that are closely aligned with the community's housing conditions and economic realities. By focusing on enhancing housing stability and quality, promoting property ownership, addressing the needs of vulnerable groups, leveraging housing for economic development, and improving community infrastructure, stakeholders can develop interventions that are not only responsive but also transformative. This comprehensive approach ensures that livelihood projects contribute to sustainable economic empowerment and improved living standards, reflecting a holistic understanding of the community's needs and aspirations. **Table 6** provides a comprehensive view of the livelihood activities of the 4Ps beneficiaries' parents in Dingalan, Aurora, offering crucial insights into the economic landscape and potential areas for development. The distribution of means of living reveals a diverse array of primary economic activities, with "pagtatanim" (planting crops) being the most common form of livelihood practiced by 15.87% of the population. This is closely followed by "pangingisda" (fishing), "pagtitinda" (vending), and "pangkakaingin" (slash-and-burn agriculture), each accounting for 14.28% of the livelihood activities. Other significant activities include "pagluluto" (cooking) at 11.11% and "pananahi" (sewing) at 7.94%, with "pangangaso" (hunting) and "paghahabi" (weaving) being less common.

The prominence of "pagtatanim" and "pangkakaingin" suggests a strong agricultural base within the community, potentially indicating that a significant number of beneficiaries either own or have access to arable land. This reliance on agriculture and related activities, such as coco-based production, points to the importance of land for the community's economic well-being and underscores the potential for livelihood projects to focus on enhancing agricultural productivity and sustainability. Given the challenges associated with slash-and-burn agriculture, including its environmental impact, there is a compelling need to introduce sustainable farming practices and diversify crops to ensure long-term viability and reduce environmental degradation.

The substantial engagement in "pangingisda" reflects the community's geographical setting that may provide access to fishing as a viable livelihood. This suggests opportunities for livelihood projects to support sustainable fishing practices and improve access to markets, thereby enhancing the economic returns from this activity.

Means of Living	Frequency	Rate
Pangangaso (hunting)	30	4.76%
Pangingisda (fishing)	90	14.28%
Pagtitinda (vending)	90	14.28%
Pagluluto (cooking)	70	11.11%
Pagtatanim (planting crops)	100	15.87%
Pangkakaingin (slash-and-burn)	90	14.28%
Paghahabi (weaving)	10	1.59%
Pananahi (sewing)	50	7.94%
OTHERS	100	15.87%
Total	630	100%

Table 6. Means of living.

The data also indicates a notable portion of the community engaged in "pagtitinda" and "pagluluto", pointing towards the potential for small-scale entrepreneurial ventures and food-based businesses. Supporting these sectors through training in business management, food safety, and marketing strategies could stimulate local economic growth and provide stable income sources.

The lesser prevalence of "paghahabi" and "pangangaso" as means of living could reflect limited access to resources or markets for these products. However, these activities could represent niche areas for development, particularly if there is potential to revive traditional crafts or sustainable hunting practices that could attract interest from markets outside the community.

In synthesizing these findings into the development of a livelihood project for Dingalan, Aurora, it's crucial to consider interventions that are both responsive to the community's current economic activities and forward-looking in terms of environmental sustainability and market viability. This could involve the introduction of innovative agricultural techniques, support for eco-friendly fishing, enhancement of vocational skills in areas with growth potential (such as cooking, sewing, and small business development), and the exploration of niche markets for less common livelihood activities.

The needs assessment highlighted in **Table 6** serves as a foundational element in tailoring livelihood projects that not only address immediate economic needs but also foster long-term sustainability and resilience among the 4Ps beneficiaries in Dingalan, Aurora. By leveraging the diverse array of existing livelihood activities, such projects can enhance the community's economic landscape, ensuring that interventions are both inclusive and impactful.

**Table 7** provides a detailed account of the medical conditions prevalent among the parents of 4Ps beneficiaries in Dingalan, Aurora, revealing critical insights into the health landscape that could significantly impact the design and

Medical Record	Frequency	Rate
Hypertension	50	17.24%
Type 1 Diabetes	50	17.24%
Type 2 Diabetes	10	3.45%
Fever/Flu	70	24.14%
Cough and Colds	70	24.14%
Skin Diseases	10	3.45%
Emphysema (Lung disease)	10	3.45%
Heart Diseases	10	3.45%
OTHERS	10	3.45%
Total	290	100%

 Table 7. Medical record (parents).

focus of livelihood projects within the "Needs Assessment of the 4Ps Beneficiaries: Basis for a Livelihood Project". The distribution of medical conditions illustrates a mix of chronic and acute illnesses, with fever/flu and cough and colds being the most common, each affecting 24.14% of the population. These conditions, often influenced by environmental factors and seasonal changes, highlight a need for improved healthcare access and disease prevention strategies within the community.

Notably, hypertension and Type 1 diabetes each affect 17.24% of the parents, signaling a substantial burden of non-communicable diseases (NCDs) that require ongoing medical management and can have profound implications for family well-being and economic stability. The presence of Type 2 diabetes, skin diseases, emphysema, and heart diseases, though less prevalent at 3.45% each, further underscores the diversity of health challenges facing the community.

The high rates of hypertension and diabetes suggest lifestyle and diet-related risk factors that may be prevalent in the community, pointing towards the potential for interventions focused on health education, nutritional support, and lifestyle modification as part of a holistic livelihood project. Such initiatives could help mitigate the impact of these chronic conditions and improve the overall health status of the beneficiaries, thereby enhancing their capacity to engage in livelihood activities.

The commonality of acute respiratory infections like fever/flu and cough and colds reflects both the vulnerability of the population to communicable diseases and the potential environmental or living conditions that may exacerbate these health issues. This observation suggests a need for improved public health measures, including vaccination programs, public health campaigns focusing on hygiene practices, and enhanced access to primary healthcare services to manage and prevent these illnesses effectively.

Given the range of health issues identified, a livelihood project in Dingalan, Aurora, should consider incorporating health and wellness components that address both the acute and chronic health needs of the community. This could include:

1) Health Education Workshops: Focused on preventive care, nutrition, and lifestyle changes to manage or reduce the risk of NCDs.

2) Access to Primary Healthcare Services: Strengthening healthcare infrastructure or facilitating mobile health clinics to provide regular check-ups, vaccinations, and treatment for common illnesses.

3) Community Gardens for Nutritional Support: Promoting the cultivation of fruits and vegetables to improve dietary diversity and nutrition, which can be particularly beneficial for managing conditions like hypertension and diabetes.

Incorporating these health-focused interventions into the livelihood project not only addresses the immediate health needs of the community but also contributes to building a healthier, more productive workforce capable of sustaining economic activities. By integrating health and livelihood strategies, the project can foster a more resilient community where improved health outcomes support and enhance economic development efforts.

In summary, the medical profile of the 4Ps beneficiaries' parents in Dingalan, Aurora, as highlighted in **Table 7**, provides a compelling case for the inclusion of health-focused interventions within the broader scope of livelihood projects. Addressing the health challenges identified can significantly contribute to the overall success of the project, ensuring that beneficiaries are not only economically empowered but also supported in achieving better health outcomes.

**Table 8** offers an insightful look into the health status of the child beneficiaries of the 4Ps program in Dingalan, Aurora, highlighting prevalent health conditions and their potential implications for livelihood projects aimed at supporting this community. The data reveals that respiratory conditions, including cough, colds, fever, and flu, are the most common ailments among children, each affecting 18.52% of the population. These conditions, often exacerbated by environmental factors and possibly indicative of underlying vulnerabilities in immune system strength, underscore the need for enhanced health and wellness support within the beneficiary population.

Additionally, the presence of skin diseases and asthma in 11.11% of the children, along with a smaller percentage (3.70%) suffering from heart diseases, points to a range of health challenges that could impact the children's well-being and development. These findings suggest several key areas for consideration in the development of a comprehensive livelihood project:

1) Enhanced Health Education and Services: The high incidence of respiratory and skin conditions among children underscores the importance of incorporating health education into livelihood projects. This could involve community workshops focused on hygiene practices, disease prevention, and management strategies tailored to the local environment and common health issues. Initiating programs that increase access to primary healthcare services, including regular health check-ups, vaccinations, and treatments, could also play a crucial role in mitigating the impact of these conditions.

Medical Record	Frequency	Rate
Cough	50	18.52%
Colds	50	18.52%
Fever	50	18.52%
Skin Diseases	30	11.11%
Flu	50	18.52%
Heart Diseases	10	3.70%
Asthma	30	11.11%
Total	270	100%

2) Environmental and Nutritional Interventions: Given the link between environmental factors and respiratory conditions, livelihood projects could benefit from integrating environmental health interventions. This might include initiatives aimed at improving air and water quality, as well as promoting nutritional support through community gardens or nutrition education programs to strengthen immune systems and overall health.

3) Inclusive Support for Chronic Conditions: The presence of asthma and heart diseases, though less prevalent, indicates the need for targeted support mechanisms within livelihood projects. This could involve facilitating access to specialized healthcare services or providing education on managing chronic conditions to ensure that affected children can participate fully in educational and community activities.

4) Strengthening Healthcare Infrastructure: The overall health profile of the children beneficiaries suggests a pressing need for strengthening local healthcare infrastructure. Livelihood projects could collaborate with local health authorities and organizations to enhance healthcare facilities, ensure the availability of essential medicines, and train community health workers to provide basic care and support for common conditions.

5) Collaborative Health and Education Initiatives: Finally, integrating health initiatives with educational support can address absenteeism and learning disruptions caused by health issues. Programs that foster a healthy school environment, including clean water access, sanitation facilities, and health education, can contribute to reducing the prevalence of communicable diseases and supporting children's ability to learn and thrive.

Incorporating these health-focused components into a livelihood project for Dingalan, Aurora, addresses not only the economic needs of the 4Ps beneficiaries but also the foundational health requirements that support children's growth, development, and educational success. By ensuring that health and wellness are integral to livelihood interventions, the project can contribute to a holistic improvement in the quality of life for beneficiary families, paving the way for sustainable development and long-term community resilience.

**Table 9**'s depiction of the educational engagement of 4Ps beneficiaries' children in Dingalan, Aurora, highlights a significant commitment to schooling across various grade levels, with a pronounced emphasis on middle to high school education. The distribution showcases a commendable level of school attendance, particularly from Grade 6 to Grade 12, where each grade level represents 9.62% of the student population. This uniformity in the higher grades underscores the effective enforcement of the 4Ps program's educational conditions, which tie financial assistance directly to school attendance, showcasing the program's success in keeping children in school.

Despite the overall positive trend in educational engagement, the sharp decline in college-level beneficiaries to just 0.96% signals potential challenges and barriers to higher education access, including financial constraints, lack of preparatory resources, or insufficient information on scholarship and support

Number of Siblings	Frequency	Rate
Grade 1	30	2.88%
Grade 2	50	4.81%
Grade 3	70	6.73%
Grade 4	90	8.65%
Grade 5	90	8.65%
Grade 6	100	9.62%
Grade 7	100	9.62%
Grade 8	100	9.62%
Grade 9	100	9.62%
Grade 10	100	9.62%
Grade 11	100	9.62%
Grade 12	100	9.62%
College Level	10	0.96%
Total	1040	100%

 Table 9. School age children (grade level).

mechanisms. This observation points to critical areas where livelihood projects could make substantial impacts, such as by providing targeted support to facilitate the transition from high school to higher education through scholarships, career counseling, and college preparation programs.

The broad span of grade levels among the beneficiaries also suggests opportunities for integrating comprehensive educational support into livelihood initiatives. Such support could include providing essential school supplies, transportation subsidies, tutorial services, and holistic family support initiatives aimed at enhancing household income, thereby indirectly supporting children's education by reducing the economic need for older students to leave school for work.

Moreover, the data reveals a potential for community-based educational enhancement programs that complement formal schooling. These could range from after-school learning opportunities to life skills and vocational training tailored to the local economic context, aimed at equipping students with practical skills for future employment or entrepreneurship.

In crafting a livelihood project that takes into account the insights from **Table** 9, stakeholders have the opportunity to develop interventions that not only promote economic empowerment but also reinforce and support the educational trajectories of beneficiary children. By fostering an ecosystem where education and livelihood development are interlinked, such initiatives can contribute significantly to breaking the cycle of poverty. This approach acknowledges the crucial role of education in empowering children and their families to achieve sustainable socio-economic betterment, ensuring that the benefits of the 4Ps program extend beyond immediate financial relief to foster long-term community resilience and development.

Table 10 provides a detailed examination of the highest educational attainment among the parents of 4Ps beneficiaries in Dingalan, Aurora, offering valuable insights into the educational background of the adult population within the program. The data reveals a diverse range of educational achievements, with significant proportions of parents having completed various stages of formal education. Notably, each of the educational categories—elementary graduate, high school up to the third year, and high school graduate—accounts for 25.93% of the parent population. Additionally, a smaller yet significant segment of the population has pursued higher education, with both college level (up to the third year) and college graduates representing 11.11% each.

This distribution indicates a broad spectrum of educational experiences among the parents, suggesting that despite economic challenges, there is a considerable value placed on education within this community. The balanced representation across different educational levels highlights the varied educational pathways that parents have taken, which may influence their perspectives on the importance of education for their children.

The presence of parents with higher education achievements, albeit in smaller numbers, is particularly noteworthy. This group exemplifies the potential for educational advancement even within economically disadvantaged communities and could serve as role models or catalysts for valuing education among the broader population. Their experiences could provide valuable insights into overcoming barriers to higher education and inspire other parents and their children to aspire to higher educational goals.

However, the data also underscores the need for targeted support to address the barriers that may prevent higher educational attainment. For parents and their families participating in the 4Ps program, access to educational opportunities and the ability to pursue and complete higher levels of education can be hindered by financial constraints, limited access to educational resources, and the need to balance educational pursuits with other economic or familial responsibilities.

Educational Attainment	Frequency	Rate
Elementary Graduate	70	25.93%
High School (Up to Third Year)	70	25.93%
High School Graduate	70	25.93%
College Level (Up to Third Year)	30	11.11%
College Graduate	30	11.11%
Total	270	100%

Table 10. Highest educational attainment (parents).

Incorporating this understanding of parents' educational attainment into the design of livelihood projects can enhance the effectiveness of these initiatives. Projects can include components that not only aim to improve economic outcomes for families but also support educational aspirations, such as:

1) Adult Education and Skills Training: Offering programs that allow parents to complete their formal education or acquire new skills can empower them economically and reinforce the value of education within the family.

2) Mentorship and Role Modeling: Leveraging the experiences of parents who have achieved higher education levels to mentor other adults and youth within the community can inspire greater educational ambition and provide practical guidance on navigating educational challenges.

3) Educational Support for Families: Integrating educational support services for children, such as scholarships, tutoring, and school supply provision, within livelihood projects can alleviate some of the financial burdens associated with schooling, making it easier for parents to prioritize and support their children's education.

By addressing the educational backgrounds and aspirations of parents within the context of livelihood projects, stakeholders can foster an environment that supports lifelong learning and creates a culture of educational attainment. This holistic approach not only aims to improve immediate economic conditions but also contributes to long-term societal development by emphasizing the importance of education as a cornerstone for sustainable progress.

**Table 11** outlines the family monthly income levels among the 4Ps beneficiaries in Dingalan, Aurora, providing an insightful overview of the economic status of these households. This income distribution is pivotal for understanding the financial challenges and opportunities within the beneficiary community, especially in relation to sustaining family needs and supporting children's education.

The data reveals a diverse income range among the families, with a notable 35% of the parents reporting a monthly income of Php 15,000 and above. This segment represents the higher earners within the program, potentially indicating a degree of economic stability that could support better access to educational resources and healthcare. Conversely, 25% of the families fall into each of the

Income	Frequency	Rate
Php 500 - 4999	30	15%
Php 5000 - 9999	50	25%
Php 10,000 - 14,999	50	25%
Php 15,000 and above	70	35%
Total	200	100%

Table 11. Family monthly income.

Php 5000 - 9999 and Php 10,000 - 14,999 income brackets, highlighting a middle-income group that may still face significant financial pressures, especially in covering educational expenses and coping with unexpected financial challenges.

The lower end of the income spectrum, where 15% of the families earn between Php 500 - 4999 monthly, underscores the acute financial constraints that can severely limit access to basic needs, let alone educational resources. This income level is particularly concerning as it suggests that a significant portion of the community lives near or below the poverty line, with limited means to support family and educational aspirations.

The income profile of the 4Ps beneficiaries' families in Dingalan, Aurora, suggests several key considerations for designing and implementing livelihood projects:

1) Economic Empowerment Initiatives: Tailoring livelihood projects to enhance income-generating capabilities across these varied income levels is crucial. For higher-income earners, projects could focus on financial literacy and investment in small businesses or agricultural enhancements. Middle-income earners might benefit from skills training and access to microcredit to diversify income sources, while lower-income groups require direct interventions aimed at securing stable employment or entrepreneurial opportunities.

2) Educational Support Programs: Given the clear link between income levels and the ability to finance children's education, integrating educational support into livelihood projects can help alleviate some of the financial burdens faced by families. This could include scholarship programs, school supply distributions, and after-school tutoring services, especially targeted at families in the lower income brackets.

3) Healthcare Access: Recognizing that health emergencies can quickly deplete family resources, incorporating affordable healthcare access into livelihood projects can protect families' incomes and ensure that financial gains are not eroded by unexpected medical costs.

4) Community Savings and Loan Associations: Establishing or supporting community-based savings and loan groups can offer a financial safety net for families, enabling them to manage emergencies and invest in their children's education without resorting to high-interest loans.

5) Advocacy and Policy Support: Lastly, leveraging the data on family income to advocate for policy changes that increase the minimum wage, improve social welfare benefits, and offer tax incentives for low-income families can contribute to long-term economic stability for 4Ps beneficiaries.

In summary, the family monthly income data from Dingalan, Aurora, not only highlights the financial realities of 4Ps beneficiaries but also underscores the importance of multifaceted livelihood projects that address immediate economic needs while building the foundations for sustainable growth. By considering these income dynamics, livelihood projects can be more effectively tailored to meet the diverse needs of the community, ensuring that all families have the opportunity to improve their living standards and support their children's education.

**Table 12** reveals the rich ethnic diversity within the 4Ps beneficiary population in Dingalan, Aurora, highlighting the presence of various ethnic groups, notably the Tagalog and Aeta/Dumagat/Agta communities, each making up 27.78% of the program's participants. This diversity is not just a demographic characteristic but a vibrant tableau of cultural practices, languages, and traditions that shape the community's identity and social interactions. The representation of Ilokanos at 19.44%, alongside Bicolano, Igorot, Mangyan, Badjao, and Pangasinense groups, further enriches this cultural mosaic, indicating a broad spectrum of cultural backgrounds among the beneficiaries.

The multicultural nature of the beneficiary population necessitates a program design that is both culturally sensitive and inclusive. Recognizing and respecting the distinct cultural identities and traditions of each ethnic group is crucial in ensuring that livelihood and educational interventions are not only effective but also culturally appropriate. This involves engaging with community leaders and representatives from each ethnic group during the planning and implementation phases of any project to ensure that their specific needs and cultural preferences are adequately addressed.

Moreover, the diverse cultural backgrounds of the beneficiaries demand tailored educational and livelihood initiatives. These initiatives should be designed to align with the unique socio-economic contexts and cultural practices of each ethnic group, potentially supporting traditional crafts, agriculture, or other culturally significant income-generating activities. Effective communication, taking into account the linguistic diversity among the beneficiaries, is key to the success of these programs. Providing program materials and conducting activities in languages understood by the beneficiaries or through interpreters can greatly enhance participation and engagement.

Ethnicity	Frequency	Rate
Tagalog	100	27.78%
Ilokano	70	19.44%
Bicolano	30	8.33%
Mangyan	10	2.78%
Igorot	30	8.33%
Aeta/Dumagat/Agta	100	27.78%
Badjao	10	2.78%
Pangasinense	10	2.78%
Total	360	100%

Table 12. Ethnicity.

Furthermore, leveraging the unique strengths, knowledge, and skills inherent in each ethnic group can significantly contribute to the effectiveness of development initiatives. For instance, indigenous knowledge of sustainable farming practices or natural resource management, particularly from communities like the Aeta/Dumagat/Agta, could be invaluable in promoting environmental conservation and sustainable livelihoods.

By incorporating the diverse cultural backgrounds of the 4Ps beneficiaries into the design and delivery of programs, stakeholders can foster a sense of ownership, participation, and sustainability. Such an approach not only respects the dignity and identity of each ethnic group but also enhances the relevance and impact of livelihood projects, ensuring they are well-received and supported by the community. This strategy is essential for the success of development initiatives in Dingalan, Aurora, highlighting the importance of cultural sensitivity and inclusivity in program implementation.

1) What benefits did the 4Ps beneficiaries receive during this time of Pandemic (COVID-19)?

The Municipality of Dingalan, Aurora, assists its populace through the 4Ps benefits, subsidy assistance under SAP, relief goods, and ESP. According to the Honorable Mayor, Shierwin Halili Taay [16], it is their way of supporting the people's needs by providing a 100% subsidy under SAP and relief goods and ESP. Further, he said that it might also minimize the spread of COVID-19 if people stay at home during the pandemic (See Table 13).

2) Are the 4Ps beneficiaries satisfied with their family's present means of living?

The 4Ps beneficiaries agreed that they are satisfied with their present means of living. Nevertheless, according to the Honorable Mayor, Shierwin Halili Taay, they are looking for more ways to provide opportunities for these people to augment their means of living. This is one of the municipality's top priority programs.

3) Do the 4Ps beneficiaries need additional income for the family?

The 4Ps beneficiaries agreed that they need additional income to sustain the family's needs for basic necessities such as food, clothing, medicine, water, shelter, and, most of all, for their children's education.

4) Are the 4Ps beneficiaries willing to undergo livelihood training to augment their family's income?

The 4Ps beneficiaries agreed that they are willing to undergo livelihood training to augment the family's income.

Benefits	Rate
Subsidy Assistance Under SAP	100%
Relief Goods and ESP	100%

Table 13. Benefits received by the beneficiaries.

Livelihood Training Programs	Yes/No
Pananahi (sewing)	Yes
Paghahabi (weaving)	No
Pagluluto ng iba't-ibang ulam (cooking)	Yes
Pagwewelding (welding)	Yes
Basic Electrical Installation	Yes
Basic Electronics	No
Pagtitingal ng pagkain (Food preservation)	Yes

Table 14. Livelihood training programs offered by the College of Education.

5) What livelihood training program would the 4Ps beneficiaries like to venture to?

The following are the livelihood training programs that the College of Education (COEd) offered to the 4Ps beneficiaries. It can be viewed from the Table that they are willing to learn more about pananahi (sewing), pagluluto ng iba'tibang ulam (cooking), pagwewelding, basic electrical installation and pagtitingal ng pagkain (food preservation) (See Table 14).

There are two (2) of the livelihood training programs that they refused to learn more about paghahabi (weaving) and basic electronics.

6) What other livelihood training program(s) would you like to suggest that are not included in the list above?

The 4Ps beneficiaries would like to venture into the livelihood training programs related to Coco-Based activities and production. This is because Aurora is agricultural land, and most of the land is covered with coconut trees, particularly Dingalan.

## **5. Recommendations**

From the above discussion and results, and to enhance the quality of life of the parents of the 4Ps beneficiaries in Dingalan, Aurora, the research team recommends the following:

1) A work plan must be formulated to incorporate the Livelihood training projects for the 4Ps beneficiaries, specifically for:

a) Pananahi (sewing);

b) Pagluluto ng iba't-ibang ulam (cooking)

c) Pagwewelding (welding);

d) Basic electrical installation;

e) Pagtitinggal ng pagkain (food preservation); and

f) Coco-based production.

2) Collaboration with the University Physician and College of Nursing to address the medical conditions of the 4Ps beneficiaries and their parents.

3) Coordinate with the College of Hotel and Restaurant Management to conduct a regular feeding program for the beneficiaries. 4) Coordinate with the LGU Dingalan and the DSWD regarding the results of the assessment.

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#### **Conflicts of Interest**

The authors declare no conflicts of interest.

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