

Mapping Local Assets through Place-Based Education for Early Childhood Education Curriculum Planning in Agrarian Sorawolio

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ARTICLE INFO	ABSTRACT
Article history: Submitted: July 12, 2026 Final Revised: August 28, 2026 Accepted: August 31, 2026 Published: August 31, 2026 Keywords: Curriculum Management; Contextual Teaching And Learning; Dynamic Classroom Environment; Early Childhood Education; Local Wisdom	Purpose: This study mapped local assets in Sorawolio District through a Place-Based Education (PBE) framework to provide an empirical basis for agroeducation-based early childhood education curriculum planning. Method: An exploratory qualitative single-case study was conducted across four early childhood education institutions and involved 35 purposively selected participants representing institution heads, teachers, parents, farmers, community leaders, PKK members, and other stakeholders. Data from environmental observations, audio-recorded semi-structured interviews, 25 curriculum and learning documents, and regional agricultural statistics were analyzed inductively. The resulting categories were interpreted through six PBE principles, with credibility supported by triangulation, member checking, peer review, and an audit trail. Findings: The analysis generated six empirical categories concerning children's proximity to agrarian environments, diverse local resources and practices, community involvement, attachment to place, environmental care, and the curricular use of local assets. Cross-source triangulation showed that environmental assets, local knowledge, sociocultural practices, and community resources were readily available in children's everyday environments but had not been systematically mapped and organized within institution-level curriculum planning. Conclusion: PBE provides a coherent framework for identifying local assets and linking them to contextualized early childhood education curriculum planning. Implications and Originality: Rather than treating PBE solely as an instructional approach, this study operationalizes its six principles as an integrated analytical framework connecting environmental assets, local knowledge, social practices, and community resources with institutional curriculum planning. The findings provide an initial empirical basis for agroeducation-based curriculum planning without claiming curriculum development, implementation, or effectiveness.



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INTRODUCTION

Place-Based Education (PBE) positions the environment in which learners live as an integral part of the educational process. Place is understood not merely as a geographical space, but as encompassing the ecological, social, cultural, economic, and historical contexts that shape learning experiences. In early childhood education (ECE), this perspective frames the environment around educational institutions as a learning resource, a space for interaction, and an experiential context closely connected to children's everyday lives. Accordingly, curriculum planning need not rely solely on general themes but may also be grounded in the characteristics of the institutional environment and the realities of the places in which children grow and develop (Garrett & Holman, 2026; Nwigwe, 2026; Semken et al., 2017; Yemini et al., 2025).

In this study, PBE is conceptualized through six interrelated principles: *Learning in Place*, *Learning from Place*, *Learning with Community*, *Developing Sense of Place*, *Learning for Place*, and *Authentic and Integrated Learning*. *Learning in Place* positions real-world environments as spaces for meaningful learning experiences; *Learning from Place* views natural resources, culture, history, and social practices as sources of knowledge; while *Learning with Community* recognizes families and community members as integral participants in the learning process. *Developing Sense of Place* relates to identity formation and attachment to place, whereas *Learning for Place* emphasizes care, responsibility, and commitment toward the environment. Collectively, these principles

support learning experiences that are authentic, contextualized, and integrated with learners' everyday lives (Bascopé & Reiss, 2021; Garrett & Holman, 2026; Kizys et al., 2025; Yemini et al., 2025).

PBE is particularly relevant to ECE because young children learn through concrete experiences, sensory exploration, play, direct observation, and interaction with their surroundings. Gardens, home yards, school grounds, residential environments, and local communities can extend children's learning spaces while strengthening their connections to identity and place (Chan & Ritchie, 2025; Kurniati & Syalfiani, 2024; Kurniati & Tolla, 2024).

Places also embody social knowledge, cultural practices, livelihoods, and community values. Accordingly, families, farmers, community organizations, and other local actors may be regarded as community assets that contribute experience-based knowledge to educational activities, particularly in rural and agrarian settings (Da Silva Florintino et al., 2023; Iturbe-Sarunic et al., 2025; Kizys et al., 2025; Russi & Da Silva, 2023). In this study, local assets refer to environmental resources, community knowledge and practices, sociocultural values, and community resources available within children's living environments that may be relevant to ECE curriculum planning (Kizys et al., 2025).

In agrarian areas, agroeducation provides a meaningful context for connecting place characteristics with children's experiences through plants, soil, water, planting activities, plant care, home gardens, and everyday community practices. Studies in early childhood education indicate that local potential can support science learning when translated into learning experiences systematically planned within the curriculum (Sutrisno et al., 2021). Gardening-based learning has also demonstrated the value of children's direct interaction with plants and their surrounding environment (Dasriana et al., 2026), while environmental education and environmental literacy contribute to the development of naturalistic intelligence and ecological awareness among young children (Fitri & Hadiyanto, 2022; Priadi & Fatria, 2024). Thus, agrarian environments have educational value not only because they provide natural objects for exploration, but also because they embody knowledge, livelihoods, social practices, and human-place relationships.

Sorawolio District, Baubau City, provides a relevant empirical context for examining these relationships. Agricultural data from 2025 indicate that, of the total agricultural land area recorded in the cross-district comparison within Baubau City, approximately 43% was located in Sorawolio District, followed by Bungi at approximately 36%, Lea-Lea at 12%, and the remaining districts collectively at around 9% (Badan Pusat Statistik Kota Baubau, 2025). Importantly, the 43% figure does not indicate that 43% of Sorawolio's total administrative area consists of agricultural land; rather, it represents Sorawolio's proportion of the total agricultural land area included in the cross-district comparison. The same statistical source also indicates the presence of biopharmaceutical crops, horticultural crops, ornamental plants, plantation crops, and food crops in the area (Badan Pusat Statistik Kota Baubau, 2025). These characteristics make Sorawolio a relevant setting for examining how an agrarian environment can be understood not only as a territorial resource but also as a potential local asset for early childhood education curriculum planning.

The underlying issue this study addresses is that the mere existence of local assets does not automatically make them part of curriculum planning. Agrarian environments may be situated close to children's everyday lives, yet their curricular use still requires systematic processes of identification, selection, organization, and integration into learning planning. This issue is particularly important in early childhood education institutions, where curriculum planning must connect environmental characteristics with learning resources, children's experiences, community knowledge, community partnerships, and assessment. Accordingly, this study does not assume that Sorawolio's agricultural potential has already been integrated into the curriculum; rather, it examines this issue empirically through observation, interviews, and analysis of instructional and curriculum documents. This approach is consistent with the exploratory case study design adopted in the study.

Previous studies provide an important foundation, but they have emphasized somewhat different areas. Research on PBE has extensively examined relationships among place, community, identity, sustainability, and locally contextualized education (Bascopé & Reiss, 2021; Garrett & Holman, 2026; Hernandez Gonzalez, 2023; Kizys et al., 2025; Yemini et al., 2025). Studies on agroecology and school gardens have emphasized connections among gardens, food, culture, and place in learning (Morales et al., 2021), whereas research on early childhood education in Indonesia has largely focused on local content, environmental education, environmental literacy, and naturalistic intelligence (Fitri & Hadiyanto, 2022; Priadi & Fatria, 2024; Sutrisno et al., 2021). Although these studies affirm the educational value of local environments, they have not adequately explained how physical assets of place, community knowledge and practices, and community resources can be mapped in an integrated manner and linked to curriculum planning at early childhood education institutions.

Based on this research gap, the present study positions the six principles of PBE as an analytical framework for mapping local assets relevant to early childhood education curriculum planning. The framework examines children's everyday living environments, local resources and knowledge, community actors, attachment to place, practices of environmental care, and their potential connections to planning learning experiences. Accordingly,

this study contributes not merely by identifying Sorawolio's agrarian potential, but by bridging the availability of local assets with their curricular organization in curriculum planning. This positioning distinguishes the study from research that focuses primarily on using the environment as an instructional medium.

On this basis, the study aims to explore Sorawolio District's potential through the PBE framework as an initial empirical basis for mapping local assets to inform agroeducation-based early childhood education curriculum planning. Specifically, the study addresses two research questions: (1) What environmental assets, local knowledge, social practices, and community resources can be identified within the context of early childhood education in Sorawolio? and (2) How can these assets be mapped through the six principles of PBE to inform curriculum planning at the level of early childhood education institutions? The study is limited to asset identification and mapping and therefore does not seek to develop, implement, or evaluate the effectiveness of an agroeducation-based curriculum.

METHOD

This study employed a qualitative approach with an exploratory single-case study design involving four early childhood education (ECE) institutions as embedded institutional units. Sorawolio District constituted the bounded case because the study focused on local assets situated within its agrarian, sociocultural, community, and educational context. The unit of analysis was the identification and mapping of environmental assets, local knowledge, sociocultural practices, and community resources, as well as their connections with institution-level ECE curriculum planning. The four participating ECE institutions served as embedded units through which the relationships among place, community resources, and curriculum planning were examined. The qualitative approach enabled the researchers to understand environmental characteristics, local actors, social practices, local resources, and community experiences within their natural settings through open-ended and interpretive field data (Hammersley, 2013). The case study design was appropriate because the investigation focused on a bounded geographical and social context and examined the relationships among the agrarian environment, community practices, and ECE curriculum planning (Okoko et al., 2023).

The study was conducted in Sorawolio District, Baubau City, Southeast Sulawesi, in April 2026. Sorawolio was purposively selected because its agrarian characteristics were closely aligned with the research focus. Gardens, household yards, local plants, soil, water, agricultural land, and community farming activities formed part of the environments in which young children lived and interacted. Four ECE institutions were purposively selected as embedded institutional units. The selection criteria included their location within Sorawolio District, proximity to agrarian or community environments, availability of curriculum and learning documents, institutional willingness to participate, and relevance of the surrounding environment to the research focus.

Participants were selected through purposive sampling based on their direct involvement in or knowledge of early childhood learning, curriculum planning, agricultural practices, local knowledge, sociocultural practices, and community life in Sorawolio. The study involved 35 participants: four heads of ECE institutions, six ECE teachers, eight parents, eight farmers, three community leaders, three members of the Family Welfare Empowerment organization (PKK), and three other local stakeholders. Each of the four participating institutions was represented by its institutional head, while the six teachers and eight parents were distributed across the four institutions. Institutional heads and teachers were included because they were directly involved in curriculum management and the implementation of learning activities. Parents were selected because their children were enrolled in the participating institutions and they were familiar with children's experiences in their home and community environments. Farmers, community leaders, PKK members, and other stakeholders were recruited from the surrounding communities because of their knowledge of local agrarian resources, sociocultural practices, and community activities relevant to the research focus.

Data were collected through environmental observations, semi-structured interviews, and document analysis. A total of six observation sessions were conducted during April 2026 across the four participating ECE institutions and selected agrarian settings in their surrounding communities. The six sessions represented the total number of observations conducted in the study rather than six sessions at each institution. Each session lasted approximately [insert the actual duration or duration range] minutes. The observed settings included ECE premises, their immediate surroundings, household yards, community gardens, agricultural land, cornfields, and the boiled-corn vendor area *Penjual Jagung Rebus*/PJR. Observations focused on gardens, local plants, soil, water, agricultural resources, institutional facilities, existing forms of environmental use, and interactions among children, families, community members, and the agrarian environment. A structured observation checklist guided the observations, which were documented through field notes, photographs, videos, and GPS coordinates. Observation records were assigned location-based codes to support analytical traceability.

Semi-structured interviews were conducted with all participant categories to capture diverse perspectives on agrarian potential, local knowledge, sociocultural practices, children's everyday experiences, curriculum planning,

and opportunities for community involvement in ECE. The interview guide covered six areas: (1) characteristics of the agrarian environment; (2) locally available resources; (3) sociocultural practices and local knowledge; (4) children's experiences with their environment; (5) the existing use of local assets in learning; and (6) opportunities for and constraints on community involvement. Each interview lasted approximately 30–45 minutes and was conducted at a location agreed upon with the participant in Sorawolio District.

With participants' consent, all interviews with the 35 participants were audio-recorded. During each interview, the researcher also took notes to document key information relevant to the research focus, contextual observations, and points requiring further clarification. Following the interviews, the recordings were reviewed, and relevant sections were transcribed verbatim. Direct quotations presented in the findings were extracted from the verbatim transcripts and checked against the original audio recordings to ensure accuracy. At the end of each interview, the researcher summarized the participant's key responses and invited the participant to confirm, clarify, correct, or expand the recorded information. All 35 participants were therefore involved in verifying their respective interview summaries. Participants' identities were anonymized using category-based codes: KP for heads of ECE institutions, G for teachers, OT for parents, P for farmers, TM for community leaders, PKK for PKK members, and PL for other local stakeholders, followed by participant numbers.

The study analyzed 25 curriculum and learning documents obtained from the four participating ECE institutions. These documents included the Operational Curriculum of the Education Unit/KOSP, semester programs, weekly lesson plans/RPPM, teaching modules, assessment records, and child portfolios. Documents were included when they were formally used by the participating institutions during the relevant academic period and contained information related to curriculum planning, environmental learning resources, local content, community involvement, or children's learning experiences. The analysis examined whether and how Sorawolio's agrarian environment, local plants, farming activities, composting practices, local knowledge, sociocultural practices, and community resources were represented in curriculum and learning plans.

Regional and agricultural statistics describing Sorawolio's agrarian context were obtained from Statistics Indonesia for 2025. These statistics were treated as contextual secondary data and were not included in the 25 institutional curriculum and learning documents. Agricultural indicators were examined according to their respective categories and original measurement units. Indicators reported in different measurement units were not directly aggregated into a single composite measure of agricultural land area.

Data analysis was conducted concurrently with data collection and followed the interactive processes of data reduction, data display, and conclusion drawing and verification (Miles et al., 2014). First, the primary researcher repeatedly reviewed the interview notes, observation records, visual documentation, and institutional documents to identify meaningful units of information. Initial codes were generated inductively from the field data, including "children's proximity to gardens," "use of household yards," "community agrarian knowledge," "community participation," and "environmental care practices." Codes with similar meanings were compared and grouped into broader empirical categories.

After the empirical categories had been established, they were interpreted through the six PBE principles: *Learning in Place*, *Learning from Place*, *Learning with Community*, *Developing Sense of Place*, *Learning for Place*, and *Authentic and Integrated Learning*. Thus, the PBE principles functioned as a second-stage interpretive framework rather than as predetermined coding categories. The analysis was organized in an evidence matrix linking data sources, initial codes, empirical categories, supporting evidence, and dominant PBE interpretations.

The primary researcher conducted the initial coding and category development. To strengthen dependability, a second researcher reviewed the codebook, category definitions, supporting evidence, and the matrix linking the empirical categories to the six PBE principles. Differences in interpretation were discussed until an agreed categorization was reached. An audit trail comprising field notes, coding records, category-development tables, evidence matrices, and records of analytical decisions was maintained to ensure that the relationships among data, categories, interpretations, and conclusions could be transparently traced.

Trustworthiness was established through source triangulation, methodological triangulation, member checking, peer review of the coding process, and maintenance of an audit trail. Source triangulation involved comparing information across heads of ECE institutions, teachers, parents, farmers, community leaders, PKK members, and other local stakeholders. Methodological triangulation involved comparing evidence obtained from interviews, observations, and document analysis. Member checking was conducted at two levels. First, all 35 participants verified the summaries of their respective interviews at the end of each interview session. Second, preliminary interpretations relevant to each participant category were subsequently presented to the participants for further confirmation. Participants were invited to clarify, correct, or expand the researchers' interpretations, and their feedback was used to refine the interview summaries, empirical categories, and analytical matrix. Ethical principles were maintained through informed consent, voluntary participation, protection of confidentiality, and the use of data solely for academic purposes. Before data collection, participants received information about the study's objectives, procedures, data use, and their right to withdraw from participation. Personal and institutional

identities were anonymized using participant and site codes. Photographs and videos were collected only with permission from the relevant participants and institutions.

RESULTS

A. Sorawolio District as an Agrarian Area

Sorawolio District is one of the areas in Baubau City characterized by a prominent agrarian profile. Agricultural data for Baubau City in 2025 indicate four major crop categories: biopharmaceutical crops, horticultural crops, ornamental plants, and plantation crops. Compared with other districts, Sorawolio shows a particularly prominent presence of biopharmaceutical and ornamental crops, as presented in Figure 1.

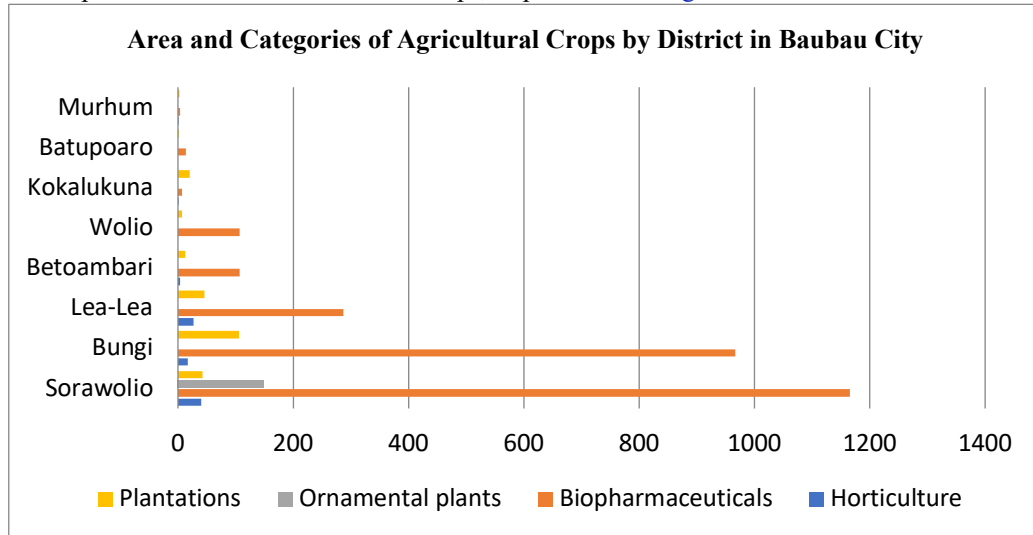


Figure 1. Area and Categories of Agricultural Crops by District in Baubau City

Source: Authors' calculations based on data from (Badan Pusat Statistik Kota Baubau, 2025).

Figure 1 presents the absolute harvested-area values of four selected crop groups across the districts of Baubau Municipality. The data indicate that Sorawolio had a substantial presence in horticultural crops, biopharmaceutical crops, ornamental plants, and plantation crops. However, the crop groups were reported using different units: horticultural and plantation crops were measured in hectares, whereas biopharmaceutical and ornamental plants were measured in square metres. Therefore, the values were not aggregated into a single measure of agricultural land area. Instead, proportional comparisons were calculated separately within each crop group by dividing Sorawolio's recorded harvested area by the total recorded area of the corresponding crop group in Baubau Municipality. Figure 2 presents these category-specific proportions.

Sorawolio District's Share of Selected Crop Harvested Areas in Baubau Municipality

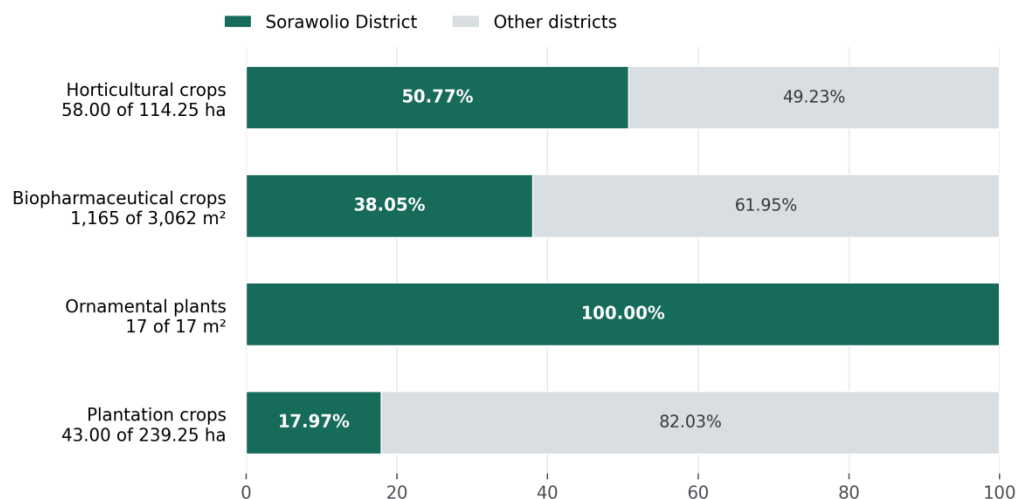


Figure 2. Sorawolio District's Share of Selected Crop Harvested Areas in Baubau Municipality, 2025.

Source: BPS-Statistics Indonesia, Baubau Municipality in Figures, 2026.

As shown in [Figure 2](#), Sorawolio accounted for 58.00 ha, or 50.77%, of the 114.25 ha of horticultural crop area recorded in Baubau Municipality. It also contributed 1,165 m², or 38.05%, of the municipality's 3,062 m² of biopharmaceutical crop area. The ornamental plant data require more cautious interpretation: although Sorawolio accounted for 100% of the area recorded for this category, the absolute area was only 17 m². For plantation crops, Sorawolio contributed 43.00 ha, representing 17.97% of the municipal total of 239.25 ha. These results show that Sorawolio's agrarian prominence differed across crop groups: it had the largest municipal share of horticultural and ornamental crops, a substantial but not the largest share of biopharmaceutical crops, and a smaller share of plantation crops. Therefore, the findings should not be interpreted as indicating that Sorawolio contained a single combined percentage of Baubau Municipality's agricultural land.

Sorawolio's category specific agricultural profile was also reflected in field observations and participant accounts. Gardens, household yards, soil, water, local plants, and agricultural activities were closely embedded in children's everyday environments. The convergence of regional statistics, observations, and interviews supports the identification of these environmental and agrarian resources as authentic local assets within a *Place-Based Education* framework, without implying that they had been systematically integrated into early childhood curriculum planning.

B. Local Asset Potential in Sorawolio Based on the Place-Based Education Approach

Analysis of the interview, observation, and document data generated six empirical categories: children's proximity to the agrarian environment, the diversity of local resources and community agrarian practices, community involvement, attachment to the local environment, environmental care practices, and the use of local assets in early childhood education curriculum planning. These categories were derived by coding the field data. We then interpreted them using the six principles of *Place-Based Education* (PBE): *Learning in Place*, *Learning from Place*, *Learning with Community*, *Developing Sense of Place*, *Learning for Place*, and *Authentic and Integrated Learning*. Several empirical categories were associated with more than one PBE principle; however, [Table 1](#) presents the most dominant principle for each category to clarify the organization of the findings.

Table 1. Mapping of Empirical Findings on Sorawolio's Local Potential Based on *Place-Based Education* Principles

Empirical Category	Main Empirical Evidence	Identified Local Assets	Dominant PBE Interpretation
Children's proximity to the agrarian environment	Interviews with teachers and parents indicated that children were accustomed to interacting with gardens, household yards, soil, water, and plants. Observations since April 2026 showed agricultural land and cornfields close to early childhood education institutions (G01; OT01; OBS-PAUD01; OBS-JG01).	Gardens, household yards, soil, water, agricultural land, local plants	<i>Learning in Place</i>
Diversity of local resources and community agrarian practices	Biopharmaceutical crops, horticultural crops, ornamental plants, plantation crops, and food crops were identified. The PJR area demonstrated connections among cornfields, harvested produce, the use of boiled corn, and local selling activities (P01; P02; G02; TM01; OBS-A01; OBS-JG01; OBS-PJR01).	Diverse plant resources, cornfields, PJR area, agricultural knowledge, use of agricultural products, and local economic practices	<i>Learning from Place</i>
Community involvement	Heads of early childhood education institutions, farmers, and PKK members identified families, farmers, farmer groups, and community organizations as holders of local knowledge and potential partners for early childhood education institutions (KP01; P03; PKK01).	Families, farmers, farmer groups, PKK, community leaders, and local business actors	<i>Learning with Community</i>
Attachment to the local environment	Local plants, family gardens, farming livelihoods, <i>Kato'o</i> , <i>Haroa</i> , planting activities, and harvesting were part of children's and their families' social experiences (OT01; TM01).	Local knowledge, community livelihoods, traditions, and sociocultural practices	<i>Developing Sense of Place</i>
Environmental care	Practices of caring for plants, watering, removing weeds, utilizing organic materials, and maintaining soil and water were identified (OT02; G03; OBS-K02).	Plants, soil, water, organic materials, humus/compost	<i>Learning for Place</i>

Empirical Category	Main Empirical Evidence	Identified Local Assets	Dominant PBE Interpretation
Use of local assets in learning planning	Interviews and reviews of the KOSP, semester programs, RPPM, teaching modules, and assessment documents showed that the local environment had been used in certain activities, but had not yet been systematically mapped and organized within curriculum planning (G04; KP02; G05; DOC-KOSP; DOC-PROSEM; DOC-RPPM; DOC-MA; DOC-AS).	Agrarian environment, local resources, community knowledge, and community resources	<i>Authentic and Integrated Learning</i>

1. Children's Proximity to the Agrarian Environment: *Learning in Place*

Interview and observation findings indicate that the agrarian environment is an integral part of children's everyday lives in Sorawolio. Gardens, household yards, soil, water, plants, and farming activities are commonly found around residential areas and early childhood education institutions. One teacher described this situation as follows: "Children here are already accustomed to seeing gardens and plants around their homes. Some of them also accompany their parents to the garden or help with watering the plants" (G01). This finding was consistent with the experience reported by a parent: "At home, children often join us when we water the plants or look at the plants in the yard. We also involve them in *Kato'o* (a local tradition of collectively planting rice in the fields). During harvest time and *Haroa* [a communal thanksgiving ceremony for agricultural produce], we also involve the children. So, plants and soil are already part of what they commonly see in their everyday lives" (OT01).

Observations since April 2026 showed that agricultural land is located near early childhood education institutions. Based on GPS coordinates, TK Negeri Pembina Sorawolio is located approximately 136 meters, in a straight-line distance, from a cornfield (OBS-PAUD01; OBS-JG01). Visual documentation further confirmed agricultural land within the same landscape as roads, residential areas, and the surrounding educational environment.

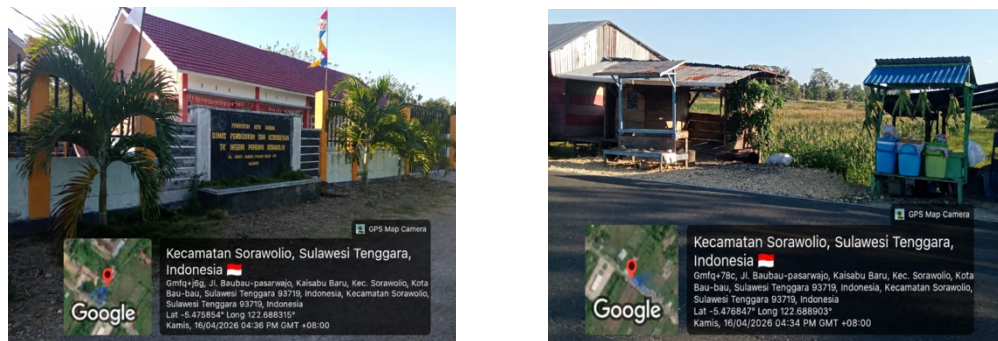


Figure 3. Proximity of an Early Childhood Education Institution to Agricultural Land and Cornfields in Kaisabu Baru Village, Sorawolio District

The convergence of teacher interviews, parent accounts, and spatial observations indicates that children's proximity to the agrarian environment constitutes a consistent empirical finding. Within the PBE framework, this category is primarily interpreted as *Learning in Place*.

2. Diversity of Agrarian Resources and Practices: *Learning from Place*

The findings revealed a diverse range of agrarian resources, including biopharmaceutical crops, horticultural crops, ornamental plants, plantation crops, and food crops. These plants were found in both community gardens and household yards. One farmer explained: "People here grow many different kinds of plants. Medicinal plants include turmeric, ginger, and aromatic ginger. They also grow various vegetables, including cabbage, chili peppers, corn, spinach, and shallots. These plants are grown both in gardens and in household yards to meet families' daily needs" (P01).

Teachers also identified local plants as sources of concrete learning experiences. As one teacher stated: "The plants found around the community can be used to introduce children to colors, shapes, smells, growth, and plant parts because these materials are nearby and easy to find" (G02). These local resources are closely tied to community practices of preparing land, planting, tending crops, harvesting, and using agricultural products. One farmer described this relationship as follows: "Farming has become part of everyday community life in Sorawolio. Children also often participate, starting from preparing the soil, planting, and watering, until the crops are ready to be harvested" (P02). A community leader provided a consistent account: "Agricultural activities are not merely the work of adults; they have become part of community life here. Farming is one of the main livelihoods of the local population" (TM01).

The PJR (*Penjual Jagung Rebus*, or boiled corn vendors) area in Kaisabu Baru Village further illustrates the characteristics of Learning from Place. Observations showed that a cornfield was located directly behind the agricultural produce vending area (OBS-JG01; OBS-PJR01). GPS documentation presented in Figure 3 indicates that the straight-line distance between the cornfield and the PJR vending area was approximately 13 meters. This spatial relationship illustrates the connection between crops as agricultural resources and how harvested products are used in community activities. In this study, the PJR area is primarily interpreted through the principle of *Learning from Place* because it represents the interconnectedness of local commodities, production practices, harvested products, their utilization, and community economic activities. At the same time, the involvement of farmers and local business actors provides a secondary connection to *Learning with Community*.

3. Community as a Source of Local Knowledge: Learning with Community

Interview findings indicate that families, farmers, farmer groups, members of *Pemberdayaan dan Kesejahteraan Keluarga* (PKK; Family Welfare Empowerment Organization), community leaders, and local business actors constitute important social resources in Sorawolio. The head of an early childhood education institution explained: “Farmers and parents can actually be involved in learning activities at school. They know more about the plants and the planting practices commonly used by the local community” (KP01). A farmer expressed a similar willingness to participate: “If the school asks us to introduce plants or demonstrate how to grow them to the children, we are willing to help because these are activities that we carry out in our daily lives” (P03). A PKK member also explained: “Activities such as planting in household yards or making use of plants available in the surrounding environment can be carried out collaboratively by schools, parents, PKK, and farmer groups. Within PKK, we also have activities involving the cultivation of family medicinal plants, which local women carry out. We already have several family medicinal plant gardens in each village” (PKK01).

Comparison across participant groups revealed complementary perspectives. Heads of early childhood education institutions viewed community members as knowledge holders who could be involved in learning activities; farmers showed a willingness to share their experience; and PKK representatives pointed to existing institutional activities directly related to the use of local plants. Within the PBE framework, these findings are primarily interpreted as *Learning with Community*.

4. Attachment to and Care for Place

Children’s relationships with the agrarian environment also have sociocultural dimensions. Their involvement in family gardens, planting and harvesting activities, the *Kato’o* tradition, and *Haroa* indicates that agriculture forms part of the social environment in which children grow and develop. These findings provide an empirical context for *Developing Sense of Place*. However, this study did not directly measure children’s *sense of place*. Therefore, the data are interpreted as environmental and social conditions that may support attachment to place, rather than as evidence that such attachment has already been established.

We also identified practices of environmental care within family activities. One parent who was also a farmer explained: “We usually involve the children in pulling or spraying weeds and watering the plants. The weeds we pull out are usually left to dry and become humus so the soil can become fertile again. Through these activities, they begin to understand that plants need to be cared for and that water should not be used excessively” (OT02). A teacher provided a similar account: “Plant-care activities are actually easy to carry out with children because they can directly water the plants, remove dry leaves and weeds, apply fertilizer, and observe changes in the plants” (G03).

Observation findings (OBS-K02) confirmed plant-care practices and the use of organic materials within the community environment. Within the PBE mapping framework, these findings are primarily associated with *Learning for Place*. Activities that may involve chemical substances, including weed spraying, were not positioned as recommended learning activities for young children.

5. Review of Learning Documents and the Position of Local Assets in Curriculum Planning

The findings from the interviews and observations were then compared with the learning and curriculum documents of the participating early childhood education institutions. The document review included the KOSP, semester programs, RPPM, teaching modules, and assessment documents. The analysis showed that the KOSP, semester programs, RPPM, and teaching modules already reflected local environmental characteristics; however, they had not yet been systematically structured around Sorawolio’s agrarian characteristics. Plants and the surrounding environment had been incorporated into certain themes or activities. However, there was little evidence of continuity explicitly linking agrarian potential, community practices, and community resources with learning planning.

The assessment documents included records of children’s activities and developmental progress, but experiences specifically related to local agrarian assets had not yet been systematically documented as a coherent sequence of place-based learning experiences. Overall, the document review revealed a gap between the

availability of local potential and its organization within early childhood education curriculum documents, indicating that environmental and community assets had not yet been fully integrated into learning planning.

This pattern was consistent with teachers' accounts. One teacher stated: "We sometimes use plants or the surrounding environment in learning activities, but this has not yet been specifically planned as a sustained program" (G04). The head of an early childhood education institution similarly explained: "There is actually considerable potential around the school, but not all of it has been mapped and specifically incorporated into the semester program or teaching modules" (KP02). Another teacher added: "Activities involving plants are usually carried out when there is a theme related to the environment. There is not yet a specific program that uses Sorawolio's agricultural potential as a basis for learning" (G05).

Comparison across data sources revealed a consistent pattern: observations indicated a high availability of agrarian assets; interviews showed that teachers, heads of institutions, families, and community members recognized this potential; while the review of learning documents indicated that local assets had not yet been systematically organized within curriculum planning. These findings suggest that the central empirical issue is not the absence of environment-based learning experiences, but rather the gap between the availability of local assets and their curricular organization within curriculum planning. Within the PBE mapping framework, this category is primarily associated with *Authentic and Integrated Learning*.

C. Synthesis of Sorawolio's Local Asset Mapping within the PBE Framework

Triangulation of interview, observation, and document data revealed a consistent pattern of relationships across the findings. *Learning in Place* was reflected in children's proximity to gardens, household yards, plants, soil, water, and agricultural land. *Learning from Place* was reflected in the diversity of plants, agrarian knowledge and practices, and the relationship between agricultural production and the use of agricultural products, which was particularly evident in the PJR area. *Learning with Community* was demonstrated through the presence of families, farmers, farmer groups, PKK members, community leaders, and local business actors as holders of local experience and knowledge.

Children's involvement in agrarian life and sociocultural practices such as *Kato'o* and *Haroa* provided an empirical context for *Developing Sense of Place*. In contrast, practices related to caring for plants, soil, and water, as well as using organic materials, provided a context for *Learning for Place*. The review of learning documents indicated that these assets had already intersected with early childhood education activities; however, they had not yet been fully organized in an integrated manner within learning planning. This constituted the key finding associated with *Authentic and Integrated Learning*.

The study's central finding is that environmental assets, local knowledge, agrarian practices, and community resources are readily available in children's everyday environments. However, they have not been fully mapped and systematically organized within curriculum planning at early childhood education institutions. Thus, the findings not only describe Sorawolio's agrarian characteristics but also demonstrate an empirical relationship between place-based potential and early childhood education curriculum planning.

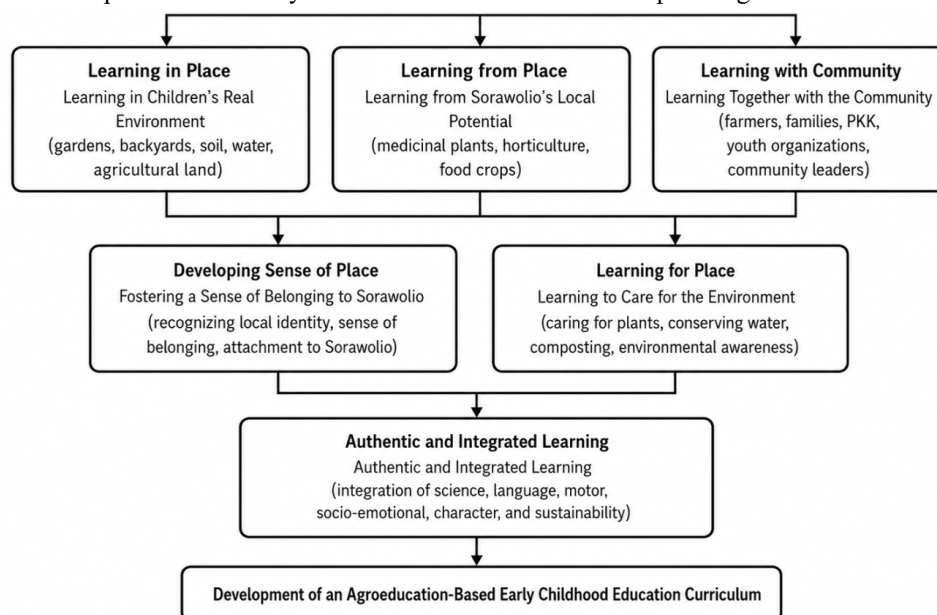


Figure 4. Concept Map of Sorawolio's Potential as a PBE Context for Developing an Agroeducation-Based Early Childhood Education Curriculum

The mapping results provide an initial empirical basis for agroeducation-based early childhood education curriculum planning. However, this study is limited to identifying and mapping local assets and therefore does not demonstrate the development, implementation, or effectiveness of an agroeducation-based curriculum.

DISCUSSION

1. Agrarian Environments as Place-Based Learning Assets

The findings indicate that Sorawolio's agrarian characteristics are not merely geographical features, but constitute an experiential environment that directly intersects with children's everyday lives. The proximity of early childhood education institutions to gardens, household yards, plants, soil, water, and agricultural land reinforces the principle of *Learning in Place*, as place becomes part of children's concrete experiences rather than simply serving as a backdrop for learning. This finding is consistent with (Aquiye-Mansilla, 2025; Campbell & Speldewinde, 2022; Gusni et al., 2026; Mayar et al., 2022), who emphasize the importance of real-world environments for young children's learning experiences, development, creativity, and environmental awareness. The present study extends this perspective by showing that the spatial proximity between early childhood education institutions and agrarian environments can be mapped as an environmental asset for institution-level curriculum planning, indicating that place-based learning experiences do not always need to be created through environments deliberately designed by schools.

The principle of *Learning from Place* is reflected in the diversity of local plants and the agrarian knowledge and practices associated with them. Local resources include not only biopharmaceutical crops, horticultural crops, food crops, ornamental plants, and plantation crops, but also community practices related to planting, tending, harvesting, and utilizing agricultural products. The PJR area broadens this interpretation by connecting cornfields with harvested produce, the use of boiled corn, and local economic activities. Thus, place provides not only natural objects for learning, but also knowledge generated through the relationships among the environment, livelihoods, and community life. This finding is consistent with (Agustin et al., 2022; Ali et al., 2023), who highlight the importance of environmental exploration in providing concrete learning experiences for young children. However, the Sorawolio context suggests that learning potential can be understood more broadly as an ecological-social continuum, rather than merely as using natural objects as instructional media.

2. Community, Attachment, and Care for Place

The dimension of *Learning with Community* is reflected in the presence of families, farmers, farmer groups, PKK members, community leaders, and local actors as holders of knowledge derived from everyday experience. Heads of early childhood education institutions recognized community members as valuable sources of knowledge; farmers expressed willingness to share their experiences; and PKK members participated in activities related to the use of local plants. This finding is consistent with (Rodríguez-Donoso & Camacho González, 2026), who emphasize the importance of community participation for the sustainability of early childhood education. The present study further highlights that the mere presence of community members does not automatically constitute curricular capacity. Community knowledge takes on a curricular function when early childhood education institutions can identify knowledge holders, determine appropriate forms of involvement, and intentionally connect their contributions to children's learning experiences.

Children's involvement in family gardens, planting and harvesting activities, and sociocultural practices such as *Kato'o* and *Haroa* provides a context for *Developing Sense of Place*. Meanwhile, activities related to plant care, water management, the use of organic materials, and maintaining soil fertility provide a context for *Learning for Place*. These findings align Aquiye-Mansilla (2025) and Campbell and Speldewinde (2022) on the role of environmental experiences in fostering ecological awareness. However, this study did not directly measure changes in children's *sense of place* or ecological behavior; therefore, the findings are interpreted as social and ecological conditions that may support attachment to and care for place. In addition, not all agrarian practices are suitable for direct inclusion in children's activities. Potential risks associated with agricultural tools, chemical substances, field conditions, and weather exposure require careful selection of local assets based on safety and developmental appropriateness.

3. PBE as a Framework for Mapping Local Assets for Early Childhood Education Curriculum Planning

The most significant finding for curriculum planning is the gap between the availability of local assets and their curricular organization. A review of the KOSP, semester programs, RPPM, teaching modules, and assessment documents showed that plants and the local environment had already been incorporated into several learning activities; however, agrarian potential, community practices, and community resources had not yet been mapped in an integrated manner as a basis for curriculum planning. This finding extends the work of Agustin et al. (2022) and Ali et al. (2023) by suggesting that the key issue is not merely how the environment can be used as a learning

resource, but how early childhood education institutions identify, select, organize, and integrate local potential into curriculum documents and planning.

Within this framework, *Authentic and Integrated Learning* should not be understood simply as learning that involves real-world objects. Authenticity emerges when children's lived experiences, environmental resources, community knowledge, play activities, and developmental goals are meaningfully connected within learning planning. This study's conceptual contribution lies in using the six PBE principles as an analytical framework to map local assets and link them to early childhood education curriculum planning. *Learning in Place* identifies the spaces in which children live and learn; *Learning from Place* identifies local resources and knowledge; *Learning with Community* recognizes community actors as knowledge holders; *Developing Sense of Place* addresses dimensions of attachment to place; *Learning for Place* maps practices of environmental care; and *Authentic and Integrated Learning* connects these assets to the planning of learning experiences. A single asset may intersect with more than one principle; for example, the PJR area is primarily associated with *Learning from Place* but also has a secondary connection to *Learning with Community*.

This study positions *Place-Based Education* as an analytical framework for mapping local assets that are relevant to children's everyday lives and the context of early childhood education institutions. The mapping results indicate that environmental assets, local knowledge, social practices, and community resources are readily available, yet they have not been fully and systematically organized within curriculum planning. These findings provide an empirical basis for contextualized early childhood education curriculum planning grounded in Sorawolio's agrarian characteristics.

CONCLUSION

This study demonstrates that Sorawolio District has agrarian, social, cultural, and community assets relevant for mapping through a *Place-Based Education* framework. Children's proximity to gardens, household yards, plants, soil, water, and agricultural land reflects *Learning in Place*; the diversity of local resources, farming practices, and the PJR area reinforces *Learning from Place*; while families, farmers, farmer groups, PKK members, community leaders, and local actors represent *Learning with Community*. Sociocultural practices such as *Kato'o* and *Haroa*, together with activities related to plant and environmental care, provide contexts for *Developing Sense of Place* and *Learning for Place*. However, the review of KOSP, semester programs, RPPM, teaching modules, and assessment documents indicates that these assets have not yet been fully and systematically organized within learning planning. Thus, the central finding of this study is the gap between the availability of local assets and their organization within early childhood education curriculum planning.

The conceptual contribution of this study lies in using the six PBE principles not merely as a learning approach, but as an analytical framework for mapping local assets and linking them to curriculum planning at the level of early childhood education institutions. This framework connects place, sources of local knowledge, community actors, attachment to place, environmental care, and the planning of learning experiences. The findings provide an initial empirical basis for agroeducation-based early childhood education curriculum planning; however, they do not demonstrate curriculum effectiveness because the study was limited to identifying and mapping local assets. Future research should therefore develop a curriculum prototype based on the mapping results, conduct expert and practitioner validation, implement it in early childhood education institutions on a limited scale, and evaluate teacher and child responses. Further studies in agrarian areas or settings with different environmental characteristics are also needed to examine the transferability of this PBE-based asset-mapping framework.

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