



Utilization of Corn Husk Waste into Creative Economy Products: A Community Empowerment Effort in Simbar Waringin Village Lampung

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ABSTRACT: Agricultural waste, such as corn husks, often presents an environmental problem and remains underutilized. This community service initiative aimed to empower community organizations in Simbar Waringin Village, Central Lampung, by transforming corn husk waste into creative economy products. The activity employed the Asset-Based Community Development (ABCD) approach, encompassing stages of preparation, asset identification, program design, workshop implementation, and evaluation. The results indicated that the community successfully processed corn husks into various handicraft products, including ornamental flowers, woven bags, and souvenirs. This activity not only enhanced the skills and creativity of the participants but also strengthened solidarity among village organizations (PKK, Karang Taruna, and Farmers' Groups) and opened alternative economic opportunities. This waste utilization aligns with the principles of a circular and green economy, where environmental problems are converted into economic opportunities. Although marketing remains a challenge, the potential for product development and access to digital markets is wide open for the program's sustainability. In conclusion, community empowerment based on local potential is proven effective as a sustainable development strategy that integrates social, economic, and environmental aspects.

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1. INTRODUCTION

Corn is a primary agricultural commodity in Indonesia, with national production steadily increasing each year (Badan Pusat Statistik, 2024). This increased production results in an abundance of agricultural waste, particularly corn husks (*klobot*), of which only 5% of the total corn plant is utilized, while the remaining 95% becomes waste (Faesal, 2013). Simbar Waringin Village, Trimurjo District, Central Lampung Regency, is a corn production center with a harvested area reaching 1,202 hectares (BPS Kab. Lampung Tengah, 2022). To date, corn husk waste in the village has only been used on a limited basis as animal feed or fuel, thus potentially becoming an environmental problem without providing significant economic value to the community.

However, corn husks possess strong physical characteristics, such as high tensile strength and low water absorption (Adnan, 2006), making them potentially suitable for processing into various handicraft



products. Previous research indicates that corn husk waste can be utilized into value-added products such as accessories, bags, and ornamental flowers (Paramita, 2010). Nonetheless, this utilization remains suboptimal due to limited community skills and knowledge. Therefore, structured empowerment efforts are required to transform waste into economic opportunities.

This community service activity aims to empower community organizations in Simbar Waringin Village, particularly Farmers' Groups, PKK (Family Welfare Empowerment), and Karang Taruna (Youth Organization), through the utilization of corn husks into creative economy products. The approach employed is Asset-Based Community Development (ABCD), which positions the community as the primary subject of development by exploring and mobilizing the assets and potential they possess (Salahuddin, 2015). With this approach, it is expected that the community will not only be beneficiaries but also key actors in creating change and improving their welfare independently and sustainably.

2. METHOD

This community service activity was conducted in Simbar Waringin Village, Trimurjo District, Central Lampung Regency, Lampung Province, from June to October 2025 using the Asset-Based Community Development (ABCD) approach. The preparation stage involved proposal development, strengthening the implementation team's understanding of the ABCD framework, and determining the activity location and target participants. The primary participants were community organizations, including PKK, Karang Taruna, and Farmers' Groups, as these organizations possess significant social capital for sustainable community empowerment. The ABCD approach emphasizes identifying and mobilizing existing community assets rather than focusing on deficiencies, thereby promoting active participation and local ownership of development initiatives (Mukhlas & Hadi, 2017; Ife & Tesoriero, 2008).

The participatory phase consisted of data collection through Appreciative Inquiry (AI) and Focus Group Discussions (FGDs) to identify community assets, local needs, and development opportunities. Subsequently, an asset inventory was conducted to document the village's physical assets (rice fields, irrigation systems, and schools), social and cultural assets (community organizations and local arts), and natural resource assets, particularly corn agricultural waste. Based on these findings, the service team collaboratively designed a community empowerment program focusing on workshops for transforming corn husks into value-added handicraft products. This participatory planning process aligns with community-centered development principles that encourage collaboration, local innovation, and sustainable utilization of available resources (Chambers, 1997; Salahuddin, 2015).

The implementation phase was preceded by intensive communication with village stakeholders to strengthen collaboration and ensure active community participation throughout the program. The workshops provided hands-on training covering material preparation, petal formation, product assembly, and finishing techniques for producing handicrafts from corn husks. Finally, a participatory evaluation was carried out to assess improvements in participants' technical skills, social collaboration, and the economic potential of the products developed. This evaluation approach reflects the principles of sustainable community empowerment by measuring both social and economic outcomes while encouraging continuous community involvement (Ife & Tesoriero, 2008; Mukhlas & Hadi, 2017; Putnam, 2000).

3. RESULTS AND DISCUSSION

Activity Results

The implementation of the community service program on the utilization of corn husks in Simbar Waringin Village, Trimurjo District, Central Lampung Regency, yielded several achievements that can be categorized into aspects of production, community skills, social organization, and economic impact.

1. Village Potential Mapping

Initial observations revealed that Simbar Waringin Village possesses abundant raw material potential in the form of corn agricultural waste. The majority of the community are corn farmers, so each harvest season produces piles of corn husks that have not been optimally utilized. Husks are typically burned, used as animal feed, or left to decompose. Thus, there is

a significant opportunity to process them into creative products with market value.

2. Improvement of Community Skills

Through training and mentoring activities, members of community organizations (Karang Taruna, PKK groups, and representatives from farmer groups) acquired new skills in processing corn husks into handicraft products. Products successfully made included ornamental flowers.

Materials and Tools

1. Materials:

Dried corn husks (select those that are not too brittle, clean, and still pliable).

Floral wire (or thin wire for the stem).

Green floral tape for wrapping the stem.

Hot glue gun / wood glue / all-purpose adhesive.

Acrylic paint / textile dye (optional, for coloring the husks).



2. Tools:

Scissors.

Wire cutters.

Small brush (if coloring the husks).

Container with hot water (if needing to soften overly stiff husks).

Tweezers / clamps (for holding husks while gluing).

Steps for Making Flowers from Corn Husks

A. Material Preparation

1. Select and prepare corn husks – use dried husks, but not too brittle. If too stiff, briefly soak them in warm water, then dry with a cloth until slightly damp to make them more pliable.
2. Clean the husks – remove residual fibers or dirty parts. Trim damaged sections.
3. Coloring (optional) – if colored flowers are desired, soak the husks in a textile dye solution or diluted acrylic paint. Dry under sunlight until ready for use.

B. Making Flower Petals

1. Cut the husks into oval or pointed shapes (depending on the desired flower type, e.g., rose, tulip, or sunflower).
2. Form the center of the petal by folding or rolling a piece of husk.
3. Secure the base using a hot glue gun.



C. Forming the Pistil and Stem

1. Prepare a 20-30 cm length of floral wire as the stem.
2. Wrap the end of the wire with a small, tightly rolled piece of husk (as the flower's pistil).
3. Tie or glue it securely.

D. Assembling the Flower

1. Take one cut petal leaf and attach it to the base of the pistil.
2. Glue it in place, then add the next petals in a circular pattern until it resembles a flower.
 - o For a rose, arrange petals so they widen progressively outward.
 - o For a tulip, attach the petals more tightly and upright.
 - o For a sunflower, use longer and sharper pointed husk pieces.
3. After all petals are attached, wrap the base with floral tape or green crepe paper for a neat finish.

E. Making Leaves

1. Cut the husk into leaf shapes (oblong with pointed tips).
2. To make it more natural, create leaf veins by gently creasing the center.
3. Attach the leaves to the stem with glue and wrap again with green floral tape.



F. Finishing

1. Neatly arrange the petals to appear natural.
2. To add appeal, spray with clear varnish to make the flowers more durable.
3. The corn husk flowers are ready for use as table decorations, bouquet arrangements, or home decor.



3. Strengthening Community Organizations

The participating village community organizations gained experience in cross-group collaboration. Karang Taruna played a role in production and marketing, PKK focused on creativity and packaging, while the farmer groups helped supply raw materials. This strengthened social cohesion, broadened participation, and fostered a culture of mutual cooperation (*gotong royong*).



4. Intial Economic Impact

The products produced were successfully marketed locally, through village bazaars, consignment at local stalls, and sub-district-level SME exhibitions. In the initial phase, income was still limited, averaging IDR 500,000 to IDR 1,000,000 per month from collective sales. However, this value indicates that corn husks have real potential to be developed into an alternative economic source.

Discussion

1. Waste Utilization into Economic Value

This activity successfully transformed corn husk from agricultural waste into marketable

products. This process reflects the application of circular economy and green economy principles, where resources are utilized maximally, waste is minimized, and economic added value is created while maintaining environmental sustainability (Stahel, 2016; Pearce et al., 1989). The community not only reduces the burden of agricultural waste but also creates products with aesthetic and functional value. This aligns with the findings of Paramita (2010) and Adnan (2006), who emphasized the potential of corn husks as a raw material for handicrafts.

2. Strengthening the Capacity of Community Organizations

This program did not merely focus on transferring technical skills but also on strengthening the institutional capacity of the community. The collaboration between Karang Taruna, PKK, and farmer groups demonstrates social synergy in managing local potential. Karang Taruna played a role in design innovation and marketing, PKK focused on production, and farmer groups acted as raw material suppliers. This synergy strengthens the village's social structure and constitutes essential social capital (Putnam, 2000). This aligns with the principles of community empowerment that position the community as subjects of development (Ife & Tesoriero, 2008; Chambers, 1997), where they have control over the processes and outcomes achieved.

3. Creativity and Innovation

Creativity becomes the primary capital in developing the creative economy (Howkins, 2001). Through the learning by doing method, the community successfully developed diverse and unique product designs. This ability significantly improved through continuous learning processes (Vygotsky, 1978). Innovation in product design acts as a differentiating factor that can enhance competitiveness in the market. The higher the level of creativity and innovation, the greater the product's chances of market acceptance and contribution to the local economy (Florida, 2002).

4. Market Development Potential and Challenges

The local market responded positively to corn husk handicraft products; however, marketing remains a challenge. Market reach is still limited to the village level and social networks. Therefore, digital marketing strategies and branding become crucial. Utilizing social media and online marketplaces can broaden the market and introduce products to a wider consumer base (Kotler et al., 2017). These handicrafts can be positioned as *eco-friendly handicrafts*, thus offering added value in a market increasingly conscious of environmental issues (Keller, 2013). Digital marketing training for the community is a strategic step to overcome this limitation (Tapscott, 2009).

5. Economic and Social Impact

Although initial income remains modest, the resulting social impact is significant. This program increased community self-confidence, raised awareness about the importance of waste management, and strengthened social solidarity. Bandura (1997) states that increased *self-efficacy* is crucial for encouraging active participation and motivation. In the long term, this potential can increase household income, reduce dependence solely on corn harvests, and create new job opportunities.

6. Academic and Practical Implications

Academically, this activity reinforces the theory that community service based on local potential and the ABCD approach is an effective strategy for sustainable development. This approach aligns with the concept of community-centered development. Practically, this program provides an empowerment model that can be replicated in other villages with similar agricultural waste potential. By integrating environmental, economic, and social aspects, this program serves as an example of implementing sustainable community

empowerment.

4. CONCLUSION

This community service activity successfully demonstrated that corn husk waste in Simbar Waringin Village can be utilized into creative economy products with economic value. The ABCD approach proved effective in empowering the community by leveraging the assets and potential they possess. This program yielded a dual impact: improved economic skills and strengthened social capacity of community organizations. With sustainable marketing strategies and ongoing mentoring, the potential of this agricultural waste-based creative economy can become a significant alternative source of income while supporting sustainable development principles. Community empowerment based on local potential proves to be a strategic step in creating an independent, creative, and competitive village.

For academics and subsequent researchers, this activity opens space for deeper scientific exploration. Further research could focus on studies of effective branding and packaging strategies to enhance product appeal and value, in-depth analysis of the long-term economic impact on income and community welfare, as well as comparative studies with other villages possessing similar agricultural waste potential. Additionally, research on optimizing the raw material supply chain and production efficiency is also crucial to support a larger business scale. Through synergy between the community, government, and academia, empowerment based on local potential can serve as a model for independent, creative, and sustainable village development.

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