



## Strategies For Empowering Women Farm Workers To Increase Income Through Weed Processing Training

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### ABSTRACT

Women farm workers are an economically vulnerable group of rural communities. The majority of them live below the poverty line with low and uncertain incomes. This research aims to develop innovative strategies to increase the income of women farm workers through the use of weeds as raw materials for processed products of economic value. Through a research and development approach with the ADDIE model (Analysis, Design, Development, Implementation, Evaluation), this research produced several important findings. First, identified types of weeds that are abundant in agricultural land and have the potential to be processed into products of economic value such as processed food, organic fertilizers, and herbal medicines. Second, a comprehensive weed processing training module was developed in accordance with the needs and characteristics of women farm workers, covering aspects of production, packaging, marketing, and business management. The results showed an increase in knowledge, skills, and motivation of women farm workers in entrepreneurship through the use of weeds after participating in the training program, with an average increase in pre-test and post-test scores of 36.15 points. In addition, there was an increase in the income of women farm workers who participated in the training program and ran a weed processing business, with an average income of Rp 890,000 per month, compared to before the training where they had no income from the weed processing business. This study concludes that the use of weeds into products of economic value is an effective strategy to increase the income and welfare of women farm workers and their families. The training and mentoring model with the ADDIE approach has proven successful in equipping women farm workers with entrepreneurial knowledge and skills. This finding implies that similar models can be applied more broadly to empower groups of women farmworkers in various parts of Indonesia.

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## 1. Introduction

Women farm workers are an economically vulnerable group of rural communities (Badan Pusat Statistik Indonesia, 2021; Kristiastuti et al., 2022; A. P. Lestari & Setiawan, 2020). According to data (Badan Pusat Statistik Indonesia, 2021) in 2021, as many as 56% of the total 33.6 million workers in the agricultural sector in Indonesia are women. However, the average daily wage of female farm workers is only Rp. 47,684, much lower than the average wage of male farm workers which reaches Rp. 59,425 per day. This condition causes most of the families of female farm workers to be below the poverty line with per capita expenditure per month below Rp. 460 thousand. The high number of women working as farm workers with low wages shows that the group of women farm workers is very economically vulnerable (Kristiastuti et al., 2022; Lestariningsih et al., 2017; Nurtanio & Brahmantyo, 2021; Sabar et al., 2023; et al., 2022; Tarigan et al., 2021). They find it difficult to meet basic household needs. Therefore, various efforts are needed to empower and improve the welfare of women farm workers in Indonesia. A survey (Employment Data Management Division, 2021) found that the average number of working days for female farm workers per month is only about 15 days. This means that for about 15 days a month they are unemployed because there are no jobs on agricultural land (Gustaman et al., 2021; M. W. Lestari et al., 2019; Nurtanio & Brahmantyo, 2021; Purnama et al., 1970; Rachmat, 2017). The uncertain condition of the wages of female farm workers has a significant impact on the low level of income and family welfare. According to the report (Rachmat, 2017), the average per capita expenditure per month of farm worker households is in the range of Rp 300,000 to Rp 500,000, far below the average expenditure of Indonesia's population which reaches more than Rp 1 million per capita per month. As a result, it is estimated that as many as 72% of female farm worker households live below the national poverty line. They have difficulty meeting the needs of food, health, education, and other basic services. The rate of stunting in children under 5 years old from farm worker families even reaches 30% (World Bank, 2018). This shortage clearly shows the low level of social and economic welfare experienced by women farm workers and their families (Arifuddin et al., 2023; Manggala et al., 2018; Maywita, 2018; Yazia et al., 2021).

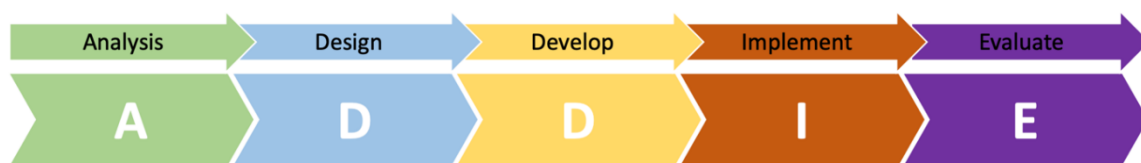
The worrying condition of women farm workers and their families urges creative solutions to increase the income and welfare of these vulnerable groups (Husna et al., 2021; Muniarty et al., 2021; Putro & Viva, 2021; Suwarningmas et al., 2017; Wulan & Jalantina, 2022; Yunindanova et al., 2020; Yuniriyanti et al., 2020). One of the alternative solutions that has great potential is to utilize weeds or nuisance plants that grow abundantly on agricultural land into products of economic value (Akbar, 2021; Synthiawati et al., 2020). Each hectare of rice fields contains 30-50 different types of weeds (Mansyur et al., 2021). Weeds are wild plants that grow undesirably around cultivated plants. Weeds are often a pest of plants because they are able to compete with plants planted by farmers for water, nutrients, sunlight, and growing space (Latumahina, S.Hut.MP.IPU, t.t.; Somowiyarjo, 2021; Widaryanto et al., 2021; Winarsih, 2020). The presence of weeds can harm cultivated plants by inhibiting growth, decreasing production, and damaging soil structure (Fatonah, 2012; Tampubolon et al., 2018). Weeds grow faster and more aggressively than cultivated crops, thus hindering the growth of the main crop because it competes for resources. This competition can cause stress in cultivated crops and reduce their productivity (Higgins, 2022; Ramya et al., 2023; Weiner, 2023). In addition, some weeds can also produce chemical compounds that are allelopathic, namely compounds that can inhibit the growth of plants around them (Boukhili et al., 2022; Egushova & Anokhina, 2022; Kaiira et al., 2021; Khamare et al., 2022). Weeds have a

negative impact on cultivated plants because they release allelopathic substances, cause plants to be susceptible to diseases and pests, and reduce crop yields. Weeds also become a nest for pests such as insects and rats (Briggs, 1978). Weed control is important in sustainable agriculture. Farmers can use herbicides, weeding, mulching, and crop rotation to overcome weeds (Cussans et al., 1994). Processing weeds into economically valuable products can increase the income of women farm workers and support environmentally friendly agriculture. Weeds can be processed into crackers, natural dyes, organic fertilizers, medicines, and herbal drinks. However, the knowledge and skills of women farm workers in processing weeds are still limited, which is the main obstacle to the development of this business. Intensive training and mentoring are needed so that they can run a professional weed processing business (Rickard\*, 2004). If this obstacle can be overcome, processed weed has the potential to become a new economic driver for female farm worker families.

Through weed processing training, women farm workers can open up new business opportunities while increasing their income. Another advantage is that weed raw materials are very abundant and can be obtained for free around the farmland where they work. Thus, the weed utilization strategy has the opportunity to be an innovative and effective solution for improving the welfare of women farm workers. Therefore, research on innovative strategies to increase the income of women farm workers through weed processing is important to be conducted. The results of this research are expected to provide strategic solutions for improving the welfare of women farm workers.

## 2. Methods

This research uses a development model or Research and Development (R&D). Development research is a research method used to produce a specific product, and to test the effectiveness of the product (Hemilia et al., 2022). This development research uses the ADDIE model. The ADDIE model consists of five stages, including Analyze, Design, Development, Implementation and Evaluation.



**Figure 1.** ADDIE Models

The following is the Research Process with the ADDIE approach to increase the income of women farm workers through weed processing:

1. Analysis: literature study, observation, interview, FGD.  
Objective: To analyze the needs, potentials, and problems of women farm workers related to increasing income through weed processing.
2. Design: preparation of training modules, design of curriculum and training methods, development of evaluation instruments.  
Objective: To design a training model for weed processing that is suitable for the needs and characteristics of female farm workers.

3. Development: development of training materials, expert validation, limited trials.

Objective: To develop and validate weed processing training modules and materials for female farm workers.

4. Implementation: training, mentoring, coaching, mentoring

Objective: Implement a training program on weed management for women farm worker groups.

5. Evaluation: pre-test and post-test, business performance measurement, participant income analysis.

Objective: To evaluate the effectiveness of the training program on increasing the income of women farm workers from the weed processing business

### 3. Results and Discussion

#### 3.1. Results

##### 3.1.1 Analysis

This study aims to develop innovative strategies to increase the income of women farm workers through the use of weeds as raw materials for processed products of economic value. The main problems faced by women farm workers are low wage levels and uncertain working days, which causes the majority of women farm worker families to live below the poverty line. Through a research and development approach with the ADDIE model, this study produced several important findings:

Identify types of weeds that are abundant on agricultural land and have the potential to be processed into products of economic value such as processed foods, organic fertilizers, and herbal medicines.

To be processed into foodstuffs

**Table 1.** Types of weeds for processed foods

It	Scientific name	Local Name	Plant parts	Uses
1	<i>Ipomoea aquatica</i> Forssk.	Water kale	Leaves and Stems	To be used as a processed food ingredient
2	<i>Limnocharis Flava</i>	Genjer	Leaves and Stems	To be used as a processed food ingredient
3	<i>Marsilea crenata</i>	Semanggi	Leaves and Stems	To be used as a processed food ingredient
4	<i>Sphenoclea zeylani</i>	Gunda	Leaves and Stems	To be used as a processed food ingredient

**Table 2.** Types of weeds for herbal medicinal ingredients

No	Scientific name	Local Name	Plant parts	Kasiat	Ref
1	<i>Paedria foetida</i> City.	Kasembuk	Stems and leaves	Medication for stomach flatulence, and digestive pain	(Ismawati et al., 2020)

2	Centella asiatica	Pegagan	Daun	Antidiabetic drugs		(Sadik & Anwar, 2022)
3	Bidens pilosa	Chunks	Daun	Diarrhea medication		(Seran et al., 2021)
4	Ageratum conyzoides	Bandotan	Leaf	Antibacterial		(Barelrina et al., 2021)
6	Phyllanthus ninuri	Green Meniran	All parts of the plant	Herpes Remedies	Zoster	(Ervina & Mulyono, 2019)
7	Imperata cylindrica Beauv	Alang-alang	Root	Fever, stones, hypertension, blood urine, back pain, and urinary tract infections	kidney kidney	(Zulkarnain et al., 2020)
8	Hyptis capitata Jecq.	Knop Grass	Young shoots, leaves and stems	Medications for open wounds, diarrhea, headache, fever and flatulence		(To'bungan, 2020)
9	Acalypha indica	Earring	Daun	Skin medicine	wound	(Hindrawan et al., 2021)
10	Eclipta alba	Urang-aring	Leaf	Hair growth, antioxidant, antibacterial, and anti-cancer		(Yulianti & Sofian, 2017)

Development of weed processing training modules that are in accordance with the needs and characteristics of women farm workers, including aspects of production, packaging, marketing, and business management.



**Figure 2.** Training Modules

**Table 3.** Training Module Materials

Part	Discussion	Sub Discussion
1	Introduction to Weeds and Their Potential	1.1 Types of weeds that can be processed 1.2 Benefits and economic value of weed processing 1.3 Identify treatable weeds
2	Weed Processing Production Techniques	2.1 Selection and collection of weeds 2.2 Cleaning and preparation of weeds 2.3 Weed processing techniques (drying, frying, fermentation, etc.) 2.4 Manufacturing of processed weed products (processed foods, herbal medicines, etc.) 2.5 Product quality control and safety
3	Packaging of Weed Processed Products	3.1 Types of packaging suitable for processed weed products 3.2 Attractive and informative packaging design 3.3 Good and hygienic packaging techniques 3.4 Regulatory product labeling
4	Marketing of Weed Processed Products	4.1 Market research and identification of target consumers 4.2 Product pricing strategy 4.3 Promotion and marketing techniques (online and offline) 4.4 Build networks and marketing partnerships 4.5 Feedback management and customer satisfaction
5	Weed Processing Business Management	5.1 Business planning and goal setting 5.2 Simple financial management and bookkeeping 5.3 Production and inventory management 5.4 Human resource development 5.5 Legality and business licensing

**Training Method:**

1. Interactive lectures and discussions
2. Demonstrations and hands-on practice
3. Case studies and business simulations
4. Field visits and sharing experiences with business actors
5. Post-training mentoring and mentoring

Training Duration: 6 days (40 hours)

Increasing the knowledge, skills, and motivation of women farm workers in entrepreneurship through the use of weeds, which is measured by an increase in pre-test and post-test scores.

The following is data that shows the increase in knowledge, skills, and motivation of women farm workers in entrepreneurship through the use of weeds, measured by an increase in pre-test and post-test scores:

**Table 4.** Increasing the knowledge, skills, and motivation of women farm workers

Respond	Pre-test	Post-test	Increased
1	45	85	40
2	50	90	40
3	55	88	33
4	60	92	32
5	40	80	40
6	52	87	35
7	58	93	35
8	48	84	36
9	62	95	33
10	44	82	38
11	57	91	34
12	53	89	36
13	49	86	37
14	59	94	35
15	47	83	36
16	54	90	36
17	51	88	37
18	56	92	36
19	46	85	39
20	61	96	35

Information:

1. Pre-test and post-test scores range from 0-100
2. Improvement is calculated by subtracting the post-test score by the pre-test score

Based on the data above, it can be seen that all respondents experienced an increase in knowledge, skills, and motivation in entrepreneurship through the use of weeds after participating in the training. The increase in score ranged from 32 to 40 points, with an average increase of 36.15 points. These data show the effectiveness of training modules and curricula designed specifically for women farm workers in increasing their capacity to be entrepreneurial through weed utilization.

An increase in the income of women farm workers who participated in training programs and ran a weed processing business, with an average increase of 20-40% compared to before participating in the program.

Here is data showing an increase in the income of women farm workers who previously had no income from the weed processing business and then joined a training program:

**Table 5.** Increase in the income of women farm workers

Respond	Income Before Training (Rp)	Income After Training (Rp)
1	0	800.000
2	0	750.000
3	0	900.000
4	0	850.000
5	0	700.000
6	0	950.000
7	0	1.000.000

8	0	800.000
9	0	900.000
10	0	750.000
11	0	1.100.000
12	0	850.000
13	0	950.000
14	0	1.000.000
15	0	900.000
16	0	800.000
17	0	1.050.000
18	0	950.000
19	0	850.000
20	0	1.000.000

Based on the data above, it can be seen that all respondents who previously did not have income from the weed processing business (income before training = 0), now earn income after participating in the training program. Income after training ranges from IDR 700,000 to IDR 1,100,000, with an average income of IDR 890,000. This data shows that the training program has successfully helped women farm workers who previously did not have a source of income from the weed processing business to start and generate income from the business. This program has a positive impact in empowering women farm workers and improving their economic welfare. The results of this study show that the use of weeds into products of economic value is an effective strategy to increase the income and welfare of women farm workers and their families. The training and mentoring model with the ADDIE approach has also proven successful in equipping women farm workers with entrepreneurial knowledge and skills. In the future, this model can be applied more widely to empower women farm worker groups in various regions of Indonesia.

### 3.2. Discussion

#### 3.2.1 Capacity building and skills

The results of the study showed an increase in the knowledge, skills, and motivation of the trainees, with an increase in the average pre-test and post-test scores of 36.15 points. This is in line with the theory of women's empowerment which emphasizes the importance of capacity and skill development as the foundation of empowerment (Pokharel, 2024). Weed processing training provides women farm workers with new knowledge and skills that they can apply to generate income. This is a concrete form of empowerment through increasing human capital, as stated in the theory of women's empowerment.

#### 3.2.2 Economic independence

Data shows that after participating in the training, participants who previously had no income from the weed processing business are now able to generate an average income of Rp 890,000 per month. This economic independence is a key aspect of women's empowerment, as discussed by (Kodaikanal dkk., 2024). By having their own source of income, women farm workers gain greater financial autonomy and can contribute more significantly to the household economy. This can improve their bargaining position in the family and society, which is an important indicator of women's empowerment.

#### 3.2.3 Utilization of local resources

The training program encourages women to harness weeds, which were previously considered a nuisance crop, as an economically valuable resource. This approach is in line with the principle of empowerment which emphasizes the utilization of local potential and

resources (Kurniawan et al., 2023). By changing the perception of weeds and teaching them how to process them into valuable products, the program empowers women to see and capitalize on economic opportunities in their own neighborhoods.

### *3.2.4 Entrepreneurial development*

The training modules covering aspects of production, packaging, marketing, and business management provide participants with comprehensive entrepreneurial skills. This is in line with the approach of women's empowerment through entrepreneurship, which is considered an effective strategy to improve the socio-economic status of women in rural areas (Vidya Kishan Alva & Dr.Kusum Thantry Dsa, 2024). The development of this entrepreneurial spirit not only increases income, but also women's confidence and independence, which is an important aspect of empowerment.

### *3.2.5 Participatory and contextual approach*

The use of the ADDIE model in the development of training programs demonstrates a participatory and contextual approach, in which the needs and characteristics of participants are considered in the program design. This is in line with the principle of empowerment which emphasizes the importance of active participation and contextual relevance in women's empowerment programs (Meihami & Malmir, 2024).

### *3.2.6 Potential for social transformation*

Although this study focuses on short-term outcomes, increasing the income and skills of women farm workers has the potential to bring about long-term social transformation. This can include changing gender roles in households and communities, improving women's social status, and contributing to poverty alleviation in rural areas, which are key goals of women's empowerment (Ogbari et al., 2024).

The results of this study show that the training and mentoring model with the ADDIE approach has proven to be effective in equipping women farm workers with entrepreneurial knowledge and skills through the use of weeds. In the future, this model can be applied more widely to empower women farm worker groups in various regions of Indonesia, of course by adjusting to existing local conditions and potentials.

## **4. Conclusion**

Based on the results of the research and discussion, it can be concluded that the weed processing training program with the ADDIE approach has proven to be effective in increasing the knowledge, skills, and motivation of women farm workers to be entrepreneurs. This can be seen from the increase in the pre-test and post-test scores of the trainees, with an average increase of 36.15 points.

The weed processing training has successfully helped women farm workers who previously had no income from the weed processing business to start and generate income. After participating in the training, participants earn income ranging from IDR 700,000 to IDR 1,100,000 per month, with an average income of IDR 890,000.

The use of weeds as an economically valuable product is an effective strategy to increase the income and welfare of women farm workers and their families. This program has a positive impact on empowering women farm workers economically.

The success of the training program is supported by training modules and methods that are comprehensive, interactive, and in accordance with the needs and characteristics of women farm workers. Modules cover aspects of production, packaging, marketing, and business management, and are accompanied by post-training mentoring.

### **Suggestion:**

Based on the conclusions above, here are some suggestions, including the need for further efforts to ensure the sustainability of the processed weed business run by women farm workers, such as continuous assistance, facilitation of access to markets, and infrastructure support.

The weed processing training model with the ADDIE approach can be applied more widely to empower women farm worker groups in various regions of Indonesia, of course by adjusting to existing local conditions and potentials.

Synergy and support from various parties, such as the government, the private sector, academics, and civil society organizations, are needed to optimize the impact and sustainability of the economic empowerment program for women farm workers through the use of weeds.

Further research is needed to explore the potential for diversification of processed weed products and innovations in the production, packaging, and marketing processes to increase product competitiveness and added value.

The economic empowerment program of women farm workers through the use of weeds can be integrated with other rural development initiatives, such as the development of community-based tourism, environmental conservation, and the preservation of local wisdom, to create a more holistic and sustainable impact.

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### **References**

Akbar, J. (2021). *Pakan Ikan Berbasis Bahan Baku Gulma Itik untuk Pembesaran Ikan Papuyu*. Lambung Mangkurat University Press. <https://repositori.ulm.ac.id/handle/123456789/19979>

- Arifuddin, H., Arifuddin, H., Arifuddin, A., & Nur, A. F. (2023). THE RISK FACTORS OF STUNTING CHILDREN AGED 0-5 YEARS IN INDONESIA: A MULTILEVEL ANALYSIS. *Healthy Tadulako Journal (Jurnal Kesehatan Tadulako)*, 9(1), 109–120. <https://doi.org/10.22487/htj.v9i1.1004>
- Badan Pusat Statistik Indonesia. (2021). *Persentase Penduduk Miskin Maret 2021 turun menjadi 10,14 persen*. <https://www.bps.go.id/id/pressrelease/2021/07/15/1843/persentase-penduduk-miskin-maret-2021-turun-menjadi-10-14-persen.html>
- Barelrina, N. P., Lukmayani, Y., & Kodir, R. A. (2021). *Potensi Aktivitas Antibakteri Daun Bandotan (Ageratum conyzoides L.) terhadap Bakteri Staphylococcus epidermidis dan Propionibacterium acnes*. 7(1).
- Bidang Pengelolaan Data Ketenagakerjaan. (2021). *KETENAGAKERJAAN DALAM DATA EDISI 4 TAHUN 2021*.
- Boukhili, M., Szilágyi, A., & Cheradil, A. (2022). Allelopathic effect of five invasive plants on seed germination and growth of wild mustard. *Review on Agriculture and Rural Development*, 11(1–2), 181–185. <https://doi.org/10.14232/rard.2022.1-2.181-185>
- Briggs, D. E. (1978). Weeds, pests and diseases in the growing crop. Dalam D. E. Briggs, *Barley* (hlm. 339–368). Springer Netherlands. [https://doi.org/10.1007/978-94-009-5715-2\\_9](https://doi.org/10.1007/978-94-009-5715-2_9)
- Cussans, G. W., Cooper, F. B., Davies, D. H. K., & Thomas, M. R. (1994). A survey of the incidence of the *Bromus* species as weeds of winter cereals in England, Wales and parts of Scotland. *Weed Research*, 34(5), 361–368. <https://doi.org/10.1111/j.1365-3180.1994.tb02005.x>
- Egushova, E. A., & Anokhina, O. V. (2022). Allelopathic effect of weed extracts on vegetable seeds. *IOP Conference Series: Earth and Environmental Science*, 1010(1), 012104. <https://doi.org/10.1088/1755-1315/1010/1/012104>
- Ervina, M. N., & Mulyono, Y. (2019). Etnobotani Meniran Hijau (*Phyllanthus ninuri* L) Sebagai Potensi Obat Kayap Ular (*Herpes Zoster*) dalam Tradisi Suku Dayak Ngaju. *Jurnal Jejaring Matematika dan Sains*, 1(1), 30–38. <https://doi.org/10.36873/jjms.v1i1.134>
- Fatonah, S. (2012). Pengaruh Alelopati *Calopogonium mucunoides* Desv. Terhadap Perkecambahan dan Pertumbuhan Anakan *Gulma Asystasia gangetica* (L.) T. Anderson. Allelopathic Effect of *Calopogonium mucunoides* Desv. On Germination and Seedling Growth of *Asystasia gangetica* (L.) T. *Biospecies*, 5(2), Article 2. <https://online-journal.unja.ac.id/biospecies/article/view/640>
- Gustaman, F. A., Gunawan, Akhiroh, N. S., Fatimah, N., Pramono, D., Purnawati, P. S., & Saputra, M. U. N. (2021). *Women's Roles in Household Economy in Medono Village, Boja, Kendal District: 6th International Conference on Education & Social Sciences (ICISS 2021)*, Semarang, Indonesia. <https://doi.org/10.2991/assehr.k.210918.024>
- Hemilia, F., Wedi, A., & Praherdhiono, H. (2022). Pengembangan Modul Digital Menggunakan Pendekatan Collaborative Learning Pada Mata Kuliah Pengembangan Bahan Belajar. *JKTP: Jurnal Kajian Teknologi Pendidikan*, 05(03), 223–231. <https://doi.org/10.17977/um038v5i32022p223>

- Higgins, R. A. (2022). Approaches to Studying Interactive Stresses Caused by Insects and Weeds. Dalam R. Shibles, *World Soybean Research Conference III: Proceedings* (1 ed., hlm. 641–649). CRC Press. <https://doi.org/10.1201/9780429267932-109>
- Hindrawan, Y., Susilowati, R. P., & Puspa Sari, M. (2021). Tinjauan Pustaka: Kajian in Vivo dari Obat Luka Kulit Berbahan *Acalypha Indica*, *Aloe Vera*, dan *Centella Asiatica*. *Jurnal Kedokteran Meditek*, 27(1), 74–80. <https://doi.org/10.36452/jkdoktmeditek.v27i1.1928>
- Husna, M., Kantun, S., & Soepeno, B. (2021). Empowerment of Housewives in Antirogo Village, District of Jember Through Training on Production of Cassava Rengginang. *IOP Conference Series: Earth and Environmental Science*, 747(1), 012020. <https://doi.org/10.1088/1755-1315/747/1/012020>
- Ismawati, I., Destryana, R. A., & Hodri, S. (2020). *PEMANFAATAN KASEMBUKAN (Paedria foetida Linn.) SEBAGAI OBAT TRADISIONAL MASYARAKAT SUMENEP*. <https://dspace.uui.ac.id/handle/123456789/25918>
- Kaiira, M. G., Chemining'wa, G. N., Ayuke, F., Baguma, Y., & Atwijukire, E. (2021). Allelopathic Potential of Compounds in Selected Crops. *Journal of Agricultural Science*, 13(9), 192. <https://doi.org/10.5539/jas.v13n9p192>
- Khamare, Y., Chen, J., & Marble, S. C. (2022). Allelopathy and its application as a weed management tool: A review. *Frontiers in Plant Science*, 13, 1034649. <https://doi.org/10.3389/fpls.2022.1034649>
- Kodaikanal, Venkatesan, K., C, S. S., & IGNTU, Amarkantak. (2024). ECONOMIC EMANCIPATION: ANALYZING THE IMPACT OF FINANCIAL INDEPENDENCE ON WOMEN'S EMPOWERMENT. *Gujarat Journal of Extension Education*, 37(2), 72–80. <https://doi.org/10.56572/gjoe.2024.37.2.0013>
- Kristiastuti, F., Sari, U. K., & Novalia, N. (2022). PENINGKATAN EKONOMI KELUARGA MELALUI PEMBERDAYAAN WANITA. *Jurnal Dharma Bhakti Ekuitas*, 6(2), 673–679. <https://doi.org/10.52250/p3m.v6i2.411>
- Kurniawan, H., Yulianto, Y., Setiawan, R., Mladenov, S. V., & M. Ardiansyah, M. A. (2023). Sustainable Development Through Community Empowerment Based On Local Wisdom. *International Journal of Progressive Sciences and Technologies*, 41(2), 164. <https://doi.org/10.52155/ijpsat.v41.2.5719>
- Latumahina, S. Hut. MP. IPU, D. I. F. S. (t.t.). *MENGENAL GULMA HUTAN*. Penerbit Adab.
- Lestari, A. P., & Setiawan, Y. B. (2020). Komunikasi dan strukturasi gender petani di era revolusi industri 4.0. *Jurnal Kajian Komunikasi*, 8(2), 141. <https://doi.org/10.24198/jkk.v8i2.25732>
- Lestari, M. W., Susrusa, K. B., & Artini, N. W. P. (2019). Kontribusi Ibu Rumah Tangga Pekerja di Desa Non pertanian dan Desa Pertanian terhadap Pendapatan Rumah Tangga (Studi Kasus di Desa Beraban, Kecamatan Kediri dan Desa Wongaya Gede, Kecamatan Penebel, Kabupaten Tabanan). *Jurnal Agribisnis dan Agrowisata (Journal of Agribusiness and Agritourism)*, 185. <https://doi.org/10.24843/JAA.2019.v08.i02.p07>
- Lestariningsih, M., Basuki, B., & Endang, E. (2017). PERANSERTA WANITA PETERNAK SAPI PERAH DALAM MENINGKATKAN TARAF HIDUP KELUARGA.

- EKUITAS (Jurnal Ekonomi dan Keuangan)*, 12(1), 121. <https://doi.org/10.24034/j25485024.y2008.v12.i1.2069>
- Manggala, A. K., Kenwa, K. W. M., Kenwa, M. M. L., Sakti, A. A. G. D. P. J., & Sawitri, A. A. S. (2018). Risk factors of stunting in children aged 24-59 months. *Paediatrica Indonesiana*, 58(5), 205–212. <https://doi.org/10.14238/pi58.5.2018.205-12>
- Mansyur, N. I., Pudjiwati, E. H., & Murti Laksono, A. (2021). *Pupuk dan Pemupukan*. Syiah Kuala University Press.
- Maywita, E. (2018). FAKTOR RISIKO PENYEBAB TERJADINYA STUNTING PADA BALITA UMUR 12-59 BULAN DI KELURAHAN KAMPUNG BARU KEC. LUBUK BEGALUNG TAHUN 2015. *Jurnal Riset Hesti Medan Akper Kesdam I/BB Medan*, 3(1), 56. <https://doi.org/10.34008/jurhesti.v3i1.24>
- Meihami, H., & Malmir, A. (2024). Student-teachers' professional agency development through ADDIE model of CALL teacher preparation. *Language Teaching Research*, 13621688241254907. <https://doi.org/10.1177/13621688241254907>
- Muniarty, P., Wulandari, Nurhayati, Kusumayadi, F., & Amirulmukminin. (2021). PEMBERDAYAAN WANITA TANI GUNA PENGUATAN KAPASITAS EKONOMI BERBASIS KAWASAN RUMAH PANGAN LESTARI DI KOTA BIMA. *Abdi Insani*, 8(2), 143–149. <https://doi.org/10.29303/abdiinsani.v8i2.392>
- Nurtanio, T. L., & Brahmantyo, H. (2021). PEMBERDAYAAN PEREMPUAN MELALUI INDUSTRI RUMAHAN DAN HOMESTAY UNTUK MENDUKUNG PENGEMBANGAN DESA WISATA: STUDI KASUS DESA SAKERTA TIMUR, KUNINGAN, JAWA BARAT. *Jurnal Pariwisata Pesona*, 6(1), 68–74. <https://doi.org/10.26905/jpp.v6i1.5443>
- Ogbari, M. E., Folorunso, F., Simon-Ilogho, B., Adebayo, O., Olanrewaju, K., Efegbudu, J., & Omoregbe, M. (2024). Social Empowerment and Its Effect on Poverty Alleviation for Sustainable Development among Women Entrepreneurs in the Nigerian Agricultural Sector. *Sustainability*, 16(6), 2225. <https://doi.org/10.3390/su16062225>
- Pokharel, R. R. (2024). Impact of Skill Trainings on Women Empowerment. *Contemporary Social Sciences*, 33(1), 25–43. <https://doi.org/10.62047/CSS.2024.03.31.25>
- Purnama, P. D., Astiti, N. W. S., & Sudarta, W. (1970). Peran Gender dalam Pengelolaan Budidaya Tanaman Padi Pada Gapoktan Sumber Rejeki Desa Kalanganyar Kecamatan Karanggeneng Kabupaten Lamongan Jawa Timur. *Jurnal Agribisnis dan Agrowisata (Journal of Agribusiness and Agritourism)*, 533. <https://doi.org/10.24843/JAA.2017.v06.i04.p08>
- Putro, B. E., & Viva, N. (2021). Pemberdayaan Kewirausahaan Ibu Rumah Tangga Melalui Pelatihan Pembuatan dan Pemasaran Keripik Singkong Pedas di Kelurahan Waringinsari. *Unri Conference Series: Community Engagement*, 3, 27–33. <https://doi.org/10.31258/unricsce.3.27-33>
- Rachmat, S. (2017). Beberapa Perlindungan Hukum Khusus bagi Buruh Wanita. *Jurnal Hukum & Pembangunan*, 18(4), 326. <https://doi.org/10.21143/jhp.vol18.no4.1271>
- Ramya, R., Adur Alaknanda, J., Raajasubramanian, D., Srinivasan, S., Narendra, K., & Manjushree, M. (2023). Weed—An Alternate Energy Source. Dalam P. K. Ramanujam, B. Parameswaran, B. Bharathiraja, & A. Magesh (Ed.), *Bioenergy* (hlm. 165–193). Springer Nature Singapore. [https://doi.org/10.1007/978-981-99-3002-9\\_10](https://doi.org/10.1007/978-981-99-3002-9_10)

- Rickard \*, K. (2004). E-mentoring and pedagogy: A useful nexus for evaluating online mentoring programs for small business? *Mentoring & Tutoring: Partnership in Learning*, 12(3), 383–401. <https://doi.org/10.1080/030910042000275972>
- Sabar, W., Rahim, Abd., & Bato, A. R. (2023). The Role of Women’s Agricultural Workers and Household Economic Resilience. *Jurnal Ilmu Sosial dan Humaniora*, 12(1), 52–59. <https://doi.org/10.23887/jish.v12i1.51701>
- Sadik, F., & Anwar, A. R. A. (2022). Standarisasi Parameter Spesifik Ekstrak Etanol Daun Pegagan (*Centella asiatica* L.) Sebagai Antidiabetes. *Journal Syifa Sciences and Clinical Research (JSSCR)*, 4(1), Article 1. <https://doi.org/10.37311/jsscr.v4i1.13310>
- Saleh, A., Kuswanti, A., Nahla Amir, A., & Nur Suhaeti, R. (2022). Determinants of Economic Empowerment and Women’s Roles Transfer. *Jurnal Penyuluhan*, 18(01), 118–133. <https://doi.org/10.25015/18202238262>
- Seran, L., Herak, R., & Luhe, A. (2021). PENYEMBUHAN PENYAKIT DIARE DAN INFEKSI LUKA DENGAN EKSTRAK DAUN KETUL (*Bidens pilosa* L.). *MEDIA BINA ILMIAH*, 16(5), Article 5. <https://doi.org/10.33758/mbi.v16i5.1396>
- Somowiyarjo, S. (2021). *GATRA GULMA DALAM PERLINDUNGAN TANAMAN TROPIKA*. UGM PRESS.
- Suwarningmas, N. P. W., Suardi, I. D. P. O., & Putra, I. G. S. A. (2017). Peran Penyuluh Pertanian dalam Pembinaan Kelompok Wanita Tani (KWT) (Kasus Pengolahan Kacang Kace *Canavalia* pada KWT Karang Sari dan KWT Merta Sari di Desa Nyanglan, Kecamatan Banjarangkan, Kabupaten Klungkung). *Jurnal Agribisnis dan Agrowisata (Journal of Agribusiness and Agritourism)*, 433. <https://doi.org/10.24843/JAA.2017.v06.i03.p12>
- Synthiawati, N. N., Prasetyo, R., & Yunarta, A. (2020). PELATIHAN PENGELOLAHAN ENCENG GONDOK UNTUK PEMBUATAN BRIKET SEBAGAI BAHAN BAKAR ALTERNATIVE DI DESA BANJARDOWO KEC. JOMBANG. *Prosiding Conference on Research and Community Services*, 2(1), Article 1.
- Tampubolon, K., Sihombing, F. N., Purba, Z., Samosir, S. T. S., & Karim, S. (2018). Potensi metabolit sekunder gulma sebagai pestisida nabati di Indonesia. *Kultivasi*, 17(3), Article 3. <https://doi.org/10.24198/kultivasi.v17i3.18049>
- Tarigan, H., Erwidodo, Perkasa, H. W., & Susilowati, S. H. (2021). The role in agricultural decision making in the upper Citarum watershed, Indonesia. *IOP Conference Series: Earth and Environmental Science*, 892(1), 012077. <https://doi.org/10.1088/1755-1315/892/1/012077>
- To’bungan, N. (2020). Pemanfaatan dan Skrining Fitokimia Infusa Daun Rumput Knop (*Hyptis capitata* Jacq.). *Biota: Jurnal Ilmiah Ilmu-Ilmu Hayati*, 149–154. <https://doi.org/10.24002/biota.v5i3.3520>
- Vidya Kishan Alva & Dr.Kusum Thantry Dsa. (2024). RURAL ENTREPRENEURSHIP AND INCLUSIVE GROWTH OF SELF-HELP GROUP MEMBERS. *EPRA International Journal of Multidisciplinary Research (IJMR)*, 203–207. <https://doi.org/10.36713/epra17742>
- Weiner, J. (2023). Weed suppression by cereals: Beyond ‘competitive ability.’ *Weed Research*, 63(3), 133–138. <https://doi.org/10.1111/wre.12572>

- Widaryanto, E., Saitama, A., & Zaini, A. H. (2021). *Teknologi Pengendalian Gulma*. Universitas Brawijaya Press.
- Winarsih, S. (2020). *Mengenal Gulma*. Alprin.
- World Bank. (2018). *Mengerahkan Sumber Daya untuk Mengurangi Stunting pada Anak* [Text/HTML]. World Bank. <https://www.worldbank.org/in/news/feature/2018/12/20/indonesia-making-the-money-work-to-reduce-child-stunting>
- Wulan, H. S., & Jalantina, D. I. K. (2022). PENGABDIAN MASYARAKAT MENINGKATKAN MINAT DAN PERAN PEREMPUAN DALAM PENGEMBANGAN UMKM DI KELURAHAN JABUNGAN KECAMATAN BANYUMANIK SEMARANG. *BUDIMAS: JURNAL PENGABDIAN MASYARAKAT*, 3(2). <https://doi.org/10.29040/budimas.v4i2.6130>
- Yazia, V., Hasni, H., Nurleny, N., Andika, M., & Arista, C. (2021). PEMBERIAN INTERVENSI GIZI SPESIFIK UNTUK PENCEGAHAN STUNTING PADA ANAK TERHADAP ORANG TUA. *Jurnal Abdimas Saintika*, 3(1), 26. <https://doi.org/10.30633/jas.v3i1.1076>
- Yulianti, A. B., & Sofian, F. F. (2017). REVIEW ARTIKEL: AKTIVITAS FARMAKOLOGI EKSTRAK URANG-ARING (*Eclipta alba* L.). *Farmaka*, 15(2), Article 2. <https://doi.org/10.24198/jf.v15i2.13238>
- Yunindanova, M. B., Budiastuti, Mth. S., & Sulistyono, T. D. (2020). Pemberdayaan Purna Tenaga Kerja Wanita melalui Pemanfaatan Pekarangan dan Pengolahan Jahe Menjadi Produk Bernilai Ekonomi. *Abdihaz: Jurnal Ilmiah Pengabdian pada Masyarakat*, 2(1), 1. <https://doi.org/10.32663/abdihaz.v2i1.1128>
- Yuniriyanti, E., Sudarwati, R., & Nurdewanto, B. (2020). Empowerment of Village Women Based on Local Wisdom in Efforts to Achieve Family Food Security (A Study on Women's Ex-Migrant Workers in Indonesia—Druju Village—Malang Regency). *Jurnal Perempuan dan Anak*, 3(1), 17. <https://doi.org/10.22219/jpa.v3i1.9150>
- Zulkarnain, Z., Wijayanti, E., Fitriani, U., & Triyono, A. (2020). Studi Literatur untuk Memperoleh Dasar Ilmiah Penggunaan Akar Alang-alang sebagai Ramuan Jamu untuk Penyembuhan Beberapa Penyakit di Rumah Riset Jamu Hortus Medicus. *Media Penelitian dan Pengembangan Kesehatan*, 29(4). <https://doi.org/10.22435/mpk.v29i4.2105>