

**Women farmers contribution in mitigating the economic recession in Indonesia**

*Contribución de las mujeres agricultoras en la mitigación de la recesión económica en Indonesia*

<https://doi.org/10.47606/ACVEN/PH0348>

**Medea Rahmadhani Utomo<sup>1\*</sup>**

<https://orcid.org/0000-0002-7094-1311>  
[medea@ub.ac.id](mailto:medea@ub.ac.id)

**Yayuk Yulianti<sup>2</sup>**

<https://orcid.org/0000-0002-4224-9790>  
[yayuk.yyl@gmail.com](mailto:yayuk.yyl@gmail.com)

**Alifiulahtin Utaminingsih<sup>2</sup>**

<https://orcid.org/0000-0002-3882-6719>  
[alifiulathin@ub.ac.id](mailto:alifiulathin@ub.ac.id)

**Vi'in Ayu Pertiwi<sup>2</sup>**

<https://orcid.org/0000-0001-9742-1749>  
[viinayu@ub.ac.id](mailto:viinayu@ub.ac.id)

**Received:** 18/04/2025

**Accepted:** 06/06/2025

**ABSTRACT**

Women farmers in rural areas that have low incomes are vulnerable to survival challenges. Despite receiving government support, they do not necessarily attain economic sufficiency. Women farmers face challenges in managing their enterprises due to decreased consumer purchasing power and income instability resulting from the economic recession during and after the pandemic. However, these challenging conditions could encourage women farmers to strengthen their economic recovery. This situation has generated several study objectives, including understanding the diverse implications of the economic recession experienced by women farmers during COVID-19. Then, identify the various options available to women farmers contributions to mitigate different types of economic recession in Indonesia. Additionally, examine the function of each stakeholder in sustaining the economic stability of agricultural households and rural communities. This research employs descriptive analysis, incorporating policy analysis with multiple stakeholders. This study indicates that local stakeholders and organizations, like farmer associations and rural governments, can offer answers to the economic recession faced by women farmers and rural communities. Women farmers can further accelerate economic recovery by increasing the production of commercially viable agricultural goods.

**Keywords:** Women Farmers; Economic Recession; COVID-19; Rural Communities.

1. National Pingtung University of Science and Technology

2. Brawijaya University

\* Autor de correspondencia: [medea@ub.ac.id](mailto:medea@ub.ac.id)

## RESUMEN

Las agricultoras en zonas rurales con bajos ingresos son especialmente vulnerables ante los desafíos relacionados con la supervivencia. A pesar de recibir apoyo gubernamental, esto no garantiza que logren alcanzar la suficiencia económica. Las mujeres agricultoras enfrentan dificultades para gestionar sus emprendimientos debido a la disminución del poder adquisitivo de los consumidores y a la inestabilidad de los ingresos provocada por la recesión económica durante y después de la pandemia. No obstante, estas condiciones adversas podrían motivarlas a fortalecer su proceso de recuperación económica. Esta situación ha dado lugar a varios objetivos de estudio, entre ellos: comprender las diversas implicaciones de la recesión económica vivida por las agricultoras durante la COVID-19; identificar las distintas alternativas disponibles en cuanto a las contribuciones que pueden realizar las mujeres agricultoras para mitigar los diferentes tipos de recesión económica en Indonesia; y examinar el papel de cada actor involucrado en el sostenimiento de la estabilidad económica de los hogares agrícolas y las comunidades rurales. Esta investigación emplea un análisis descriptivo, que incorpora el análisis de políticas con la participación de múltiples actores. El estudio revela que los actores y organizaciones locales, como las asociaciones de agricultores y los gobiernos rurales, pueden ofrecer soluciones ante la recesión económica que enfrentan las mujeres agricultoras y las comunidades rurales. Además, las agricultoras pueden acelerar aún más la recuperación económica aumentando la producción de bienes agrícolas con potencial comercial.

**Palabras clave:** Mujeres agricultoras; Recesión económica; COVID-19; Comunidades rurales.

## INTRODUCTION

Women farmers are working for economic recovery from the pandemic impacts (Ilesanmi et al., 2021). There is no guarantee of fair distribution of governmental assistance, particularly for women farmers (Landry et al., 2021). The contribution of women in reducing the impacts of the recession they face is important. A recession is an economic state marked by a substantial decrease in activity resulting from external influences, such as the COVID-19 pandemic (Priestnall et al., 2020). This study examines the extent to which rural communities, especially women farmers, can autonomously leverage their strengths to achieve economic opportunities (Linden et al., 2021).

Enhanced health hazards force enterprises to close down and disrupt supply chains, leading to extensive unemployment, decreased income, and a reduction in aggregate demand for products and services (Canhoto & Wei, 2021). The health sector implements steps to assist individuals impacted by the COVID-19, including landowners, farmers, small business owners, women, pregnant women, and children, in overcoming barriers related to health and economic access (Huss et al., 2021). The recession may result in the loss of both formal and informal sector

employment, leading to diminished income and a decrease in the assets of women farmers (Marinova & Aida, 2021).

The decline in income for agricultural workers will exacerbate household poverty and food insecurity (Andrieu et al., 2021). Excessive time spent at home might diminish productivity and increase lost economic opportunities. Several regional constraints on selling, transacting, and promoting agricultural products frequently encourage farmers to remain at home (Armantier et al., 2021). The COVID-19 pandemic seriously impacted rural communities, particularly farmers, necessitating the search for additional labor due to the unpredictability of the advantages associated with their primary occupation (Glocker & Piribauer, 2021).

Enhancing agricultural production and optimizing income from agriculture have gained relevance following the recent pandemic (Gulati & Kelly, 2020). In this case, governmental and private sector supporters will contribute material and moral support to farmers to enhance production and maintain food security (Lopez-Ridaura et al., 2021). The pandemic establishes mobility constraints and limits farmers' capacity to produce and market their goods through previously established social networks (Coutiño & Zandi, 2021). Input firms, particularly those in fertilizers, have a crucial role in sustaining agricultural continuity during the pandemic (Shibata, 2021). Nevertheless, without collaboration between the government and fertilizer firms, the subsidy program for farmers will be ineffective, and the involvement of input or fertilizer corporations will hold little significance for farmers (Porter et al., 2021).

Fortunately, women farmers continue to experience limited access to extension services, financing, subsidies, and other forms of help necessary for company stability throughout the pandemic (Middendorf et al., 2021). Recently, there has been a rise in community-based extension, the formation of agricultural cooperatives, NGOs, farmer organizations, and community-based organizations (CBOs) as principal suppliers of inputs, seeds, and extension services (Alvi et al., 2021). COVID-19 impacts on agriculture is particular, notably affecting fertilizer prices (Donnell et al., 2021). To address the lack and cost of fertilizer, farmers independently produced liquid fertilizer (Mei et al., 2021). On the other hand, women possess the capability to produce liquid fertilizer to mitigate the approaching scarcity and rising costs of fertilizer (Kringler et al., 2021).

This study emphasizes the crucial role of women farmers and stakeholders, including government policymakers in the agricultural sector, the private sector, and supporting organizations, in addressing the decline in farmers' economic activity due to the recession during the Covid-19 pandemic (Mahfud et al., 2014). This effort concentrated on Malang Regency, Indonesia. According to Tutik et al. (2011), the site was selected due to the presence of agricultural regions that received less attention during and post COVID-19.

## METHODOLOGY

The study's location was deliberately selected, specifically in Malang, Indonesia. The focus is on women farmers, as a majority of the population is engaged in agriculture. Furthermore, there has been a scarcity of research about



the involvement of women and stakeholders in addressing the issue of farmer recession. While choosing respondents, we considered the perspectives of women and other stakeholders in relation to the recession that is impacting farmers.

Research subjects include informants from rural communities, particularly women, business individuals, and housewives. The data is analyzed descriptively to clarify variations in income performance that have either decreased or increased. Explore the respondent's perspective on COVID-19 as either an emergency or a routine occurrence, collectively with the diverse solutions proposed by respondents in mitigating an economic recession.

Furthermore, the acquired data clarifies the state of economic turnover, the role of women within the family, agriculture, education, and their collaboration with stakeholders who assist women farmers. The current data processing procedure identifies the role that played the greatest contribution to the recession during COVID-19.

**Figure 1.**  
Research Location



## RESULT AND DISCUSSION

### Respondents Characteristics

Participants in this study were classified according to various attributes, including gender, age, educational attainment, family size, and primary and secondary employment. We provide further elucidation of Table 1 below.

**Table 1.**

Respondents Characteristics

Characteristics	Category	Persentage (%)
Age	17-30	20
	31-45	25
	45-60	25
	>61	30
Level of education	Elementary school	65
	Junior high school	25
	Senior high school	10
Number of Family Members	1-2	15
	3-4	50
	>5	35
Employment alternatives	Store business	15
	Construction laborers	15
	local government worker	5
	Trader	55
	Construction laborers	10

According to Table 1, the proportion of male respondents equals that of female respondents, specifically 50 percent. This is to bring together the knowledge collected on studies relevant to gender equality with the resources accessed by women during the COVID-19 pandemic. Respondents aged over 61 years were considerably numerous compared to younger age groups, although the disparity was not obvious when compared to respondents aged 31-45 and 46-60 years, each of which exhibited a percentage of 25 percent. In contrast, the age group of 17 to 30 represents the lowest percentage, accounting for only 20 percent.

The education level is primarily characterized by individuals with minimal elementary schooling. The optimal family size consists of approximately 3 to 4 individuals. His primary job is agriculture, succeeded by commerce. Meanwhile, regarding the respondent's secondary occupation, specifically traders, 55 percent.

### The economic chalanging in recession.

The rural community's perspective on the pandemic is generally viewed as a critical moment. The majority perspective, which strongly agrees with the emergence of a crisis phase attributable to the pandemic, is represented by 60 percent. No one reacted with either agreement or strong disagreement

### Income performance during the pandemic

Problems in communities have received much of the attention from the media. Nevertheless, this research demonstrates that rural communities are equally affected by the COVID-19 period. This is obvious from table 2 below. The data indicates a decline in the income performance.

**Table 2.**

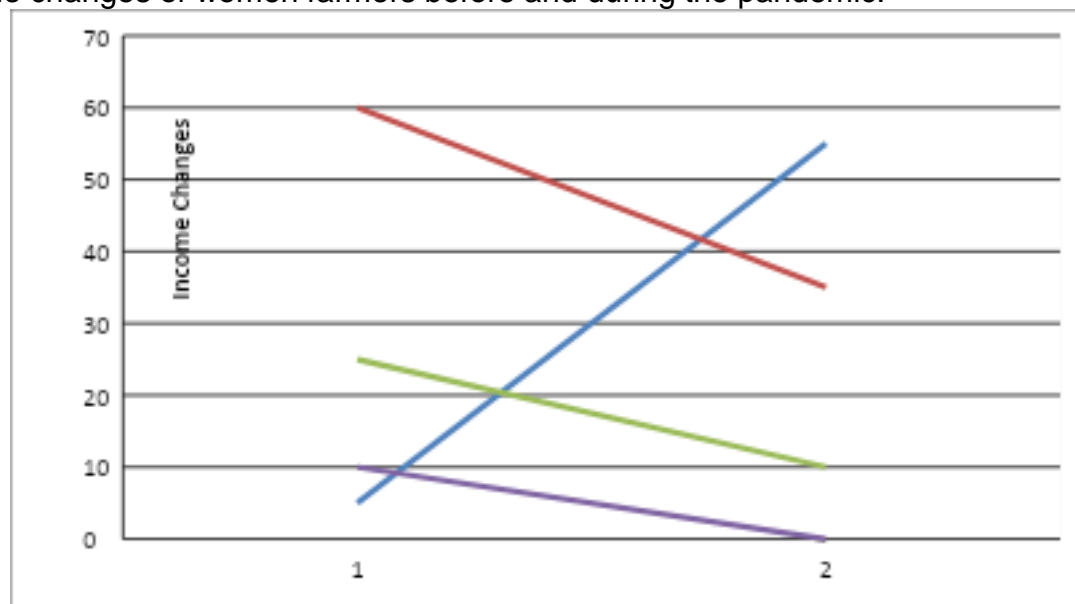
Income performance during the pandemic

Income performance	Respondents Percentage (%)	Income decline rate (%)	Respondents Percentage (%)
Greatly decreased	50	Income decline > 80	0
Decrease	30	Income decline > 60	22
Consistently	20	Income decline > 40	39
Increase	0	Income decline > 20	22
Greatly increased	0	Income consistently	17

The data indicates that income declined substantially by 50 percent during the pandemic. Nonetheless, this decrease does not reach the high range of approximately 20 to 60 percent. Some individuals continue to get a stable income as they did prior to the COVID-19 period.

**Figure 2.**

Income changes of women farmers before and during the pandemic.





### Income changes before and during the pandemic

Prior to the pandemic, the majority of individuals income was above 1 million rupiah, or 67 USD per month, with over 25 percent exceeding 3 million rupiah or 200 USD. A large percentage of community members also encountered a reduction in income.

Table 3 indicates that 55 percent of respondents earn less than 1 million per month, whereas approximately 35 percent earn above 1 million rupiah. It is noteworthy that before the pandemic, 10 percent of respondents reported incomes over 5 million rupiah; yet, during the pandemic, none of them maintained incomes above that amount. An evident economic crisis has ensued due to the COVID-19 pandemic.

**Table 3.**

Income changes before and during the pandemic

Income category (IDR / USD)	Income	
	Before the pandemic (%)	During the pandemic (%)
< 1.000.000 / 67	5	55
> 1.000.000 / 67	60	35
> 3.000.000 / 200	25	10
> 5.000.000 / 334	10	0

The economic challenges presented by COVID-19 initiated a transformation and slowdown of the economic cycle in society. The decline in consumption due to reduced incomes has caused an economic recession within the local community. Table 4 reveals that 40 percent of respondents characterized the economic recovery as slow, while 35 percent described it as very slow. This illustrates that the rural community is highly aware of the substantial effects of the pandemic on the economic cycle, even locally. Multiple factors contributed to the economic cycle's decline, specifically that 40 percent of respondents perceived a decline in consumption levels, leading to a reduction in consumers for traders and reduced purchases of agricultural products by farmers. Simultaneously, 35 percent indicated that the government's limits on community activities resulted in a recession.

**Table 4.**

Economic cycles and factors during the Covid-19 pandemic

Economic cycles	Percentage (%)	Economic slowdown factor	Percentage (%)
Slowest	35	A decline in demand	40
Slow	40	Limited access to trading	35
Fixed	25	Business competition	0
Fast	0	Expensive raw materials	0
Fastest	0	Other	25

It was a challenge to market items during the pandemic, according to 35 percent of the respondents. Access routes are partially blocked, limiting purchasers' ability to execute transactions and distribute products. This complicates product marketing for individuals during the pandemic. The COVID-19 triggered an economic decline that severely affected individuals' livelihoods.

The local economic recession includes a slowdown in economic activities, a reduction in individual incomes, and challenges in marketing agricultural products, finally framing COVID-19 as a crisis for the community.

### **The Women Farmers Contribution to Handle the Economic Recession.**

Agriculture's role to the local economy is classified as highly important, at 80 percent. Furthermore, the majority of the community, including 45 percent, attempts to revitalize business by expanding marketing efforts. To anticipate the - reduction in income, the majority of respondents, 50 percent, increase firm capacity. Another strategy is marketing items using several methods; however, 40 percent continue to depend on middlemen, while 5 percent utilize e-commerce and social media, respectively.

This results from the community's insufficient adoption of technology, with 38 percent still not embracing advances that could enhance their response to the COVID-19 outbreak. The majority of individuals depend on agricultural farming, with approximately 45 percent of respondents indicating this reliance.

The community mostly seeks to enhance business capacity, with 60 percent expressing this desire. During the pandemic, 45 percent express strong confidence in their survival, 30 percent are certain, and 20 percent accept loss. This has resulted in an increasing number of initiatives employed by the community to address the recession.

### **Strategies to mitigate the effects of recession.**

During the pandemic period, the critical role of farmers in addressing rural food challenges is intensified. Enhance rice output for farmers by acquiring it at a competitive price, thereafter packaging and promoting it to non-farmers.

This program, created by and for the rural community, is a useful initiative to tackle COVID-19, especially concerning food accessibility for local residents. Figure 6 illustrates that farmers constitute the predominant role holders in Malang, with 95 percent acting as major food providers and 5 percent supplying nutritious food.

### **The role of women farmers.**

The role of women is considered crucial, particularly in addressing the demands of food, health, education, and other family requirements. Seventy percent of respondents support this belief, while the remaining thirty percent are divided into two categories: important and ordinary.

Historically, women have consistently been responsible for food preparation, household chores, and childcare, a trend that predates pandemic.



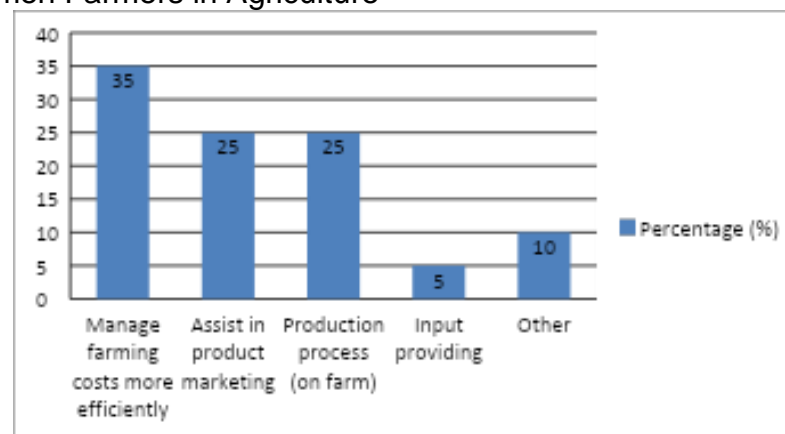
**Table 5.**  
Important Role of Womens

The Importance rate of women's roles	Percentage (%)	Women Farmers Role	Persentage (%)
Very Unimportant	0	Support the family economy	25
Not Important	0	Teaching schoolchildren during the pandemic (work from home regulation by goverment)	45
Standart	15	Manage family finances more efficiently	25
Important	15	Protect their family from the dangers of COVID-19	0
Very Important	70	Other	5

Women's involvement has increased, with 45 percent of respondents indicating their engagement in educating children at home. The educational program featuring an online system has been established as a government initiative, requiring that all schools in Indonesia utilize online programs such as Zoom, Google Meet, WhatsApp, and others.

Women perform many responsibilities inside the household, including contributing to the family income through activities such as selling or farming and overseeing household funds. Throughout the pandemic, a mother's responsibility necessitated protecting her family's health against the risks of COVID-19.

**Figure 3.**  
The Role of Women Farmers in Agriculture



Women farmers not only support their families during the recession but also manage farming activities to provide stability. They could be more efficient in supervising agricultural expenses if they had the skills in financial administration, according to 35% of respondents. Moreover, women's skill in assisting with marketing and selling products is 25 percent (table 6).

**Table 6.**

The Role of Women Farmers in Agriculture

Women Farmers Role in Agriculture	Percentage (%)
Manage farming costs more efficiently	35
Assist in product marketing	25
Production process (on farm)	25
Input providing	5
Other	10

Additionally, 25 percent of respondents indicated that women farmers may perform activities related to the agricultural production process on the farm. The role of women in agriculture is crucial for sustaining family economic stability.

### Stakeholders' involvement in enhancing the women farmers contributions

Women farmers engage in partnerships and collaboration with various stakeholders to mitigate the economic recession. The women farmers cannot independently resolve the economic recession; they require support in the form of education, financial resources, access, and physical assets from stakeholders. The stakeholders are the Department of Public Health (*Dinas Kesehatan*), Department of Social Services (*Dinas Sosial*), Department of Agriculture (*Dinas Pertanian*),

Social Service, Agriculture Service, Cooperatives, and Small Business Service, as well as regional and national governments. The Health Office is acknowledged by the study respondents for offering free health services at a rate of 45 percent. Meanwhile, the Social Service was said to have greatly contributed to the offering of essential food assistance. Up to 43 percent of respondents recognized the importance of social services in this context. Simultaneously, 38 percent of participants indicated that social services contribute to the allocation of cash support to individuals in need during the COVID-19 period.

Department of Agriculture's mission is to ensure agricultural stability within their village. Thirty percent of respondents indicated that the agricultural administration offered incentives for fertilizers and other production inputs throughout the pandemic. Twenty percent of respondents indicated that counseling was available; however, its intensity diminished due to the limited access period, which imposed restrictions on rural community activities. The role of small business services is anticipated to serve as a revitalizing force and incentive, enabling the community to sustain itself economically. Nevertheless, the study showed that 56 percent of respondents indicated that the department played no role in assisting the community in overcoming the recession.

A minority indicated that the small business offices were notably beneficial in offering loans and financial assistance for business capital. Local governments contribute to 47 percent of the provision of cash aid to rural communities impacted by COVID-19. Forty-two percent of respondents acknowledged that the local government helps the community in delivering food assistance. The central government is the focus of the vaccination effort. The program first experienced a decline in popularity due to apprehensions regarding the vaccine's negative effects. Consequently, due to the necessity of accessing public facilities for required vaccination, an increasing number of individuals are seeking immunization. Twenty-four percent of respondents recognized the federal government's responsibility in immunization. Furthermore, 40 percent of respondents indicated that the central government's role in delivering direct cash support to individuals economically impacted by COVID-19 was extremely high.

**Table 7.**

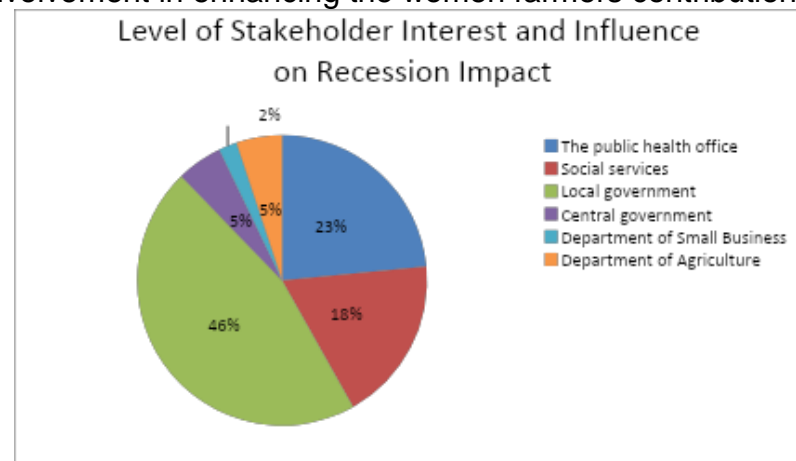
Level of Stakeholder Interest and Influence on Recession Impact

Stakeholders Role	Percentage (%)
The public health office	23
Social services	18
Local government	45
Central government	5
Department of Small Business	2
Department of Agriculture	5

Stakeholders possess different levels of interest and influence in mitigating the effects of COVID-19. Table 7 illustrates that 45 percent of respondents indicated that local governments possess the greatest interest and influence in addressing the recession resulting from the pandemic. The Health Service, including 23 percent, also impacts the pandemic. The social service offers an 18 percent interest rate to aid the local community in addressing the recession.

**Figure 4.**

Stakeholders' involvement in enhancing the women farmers contributions



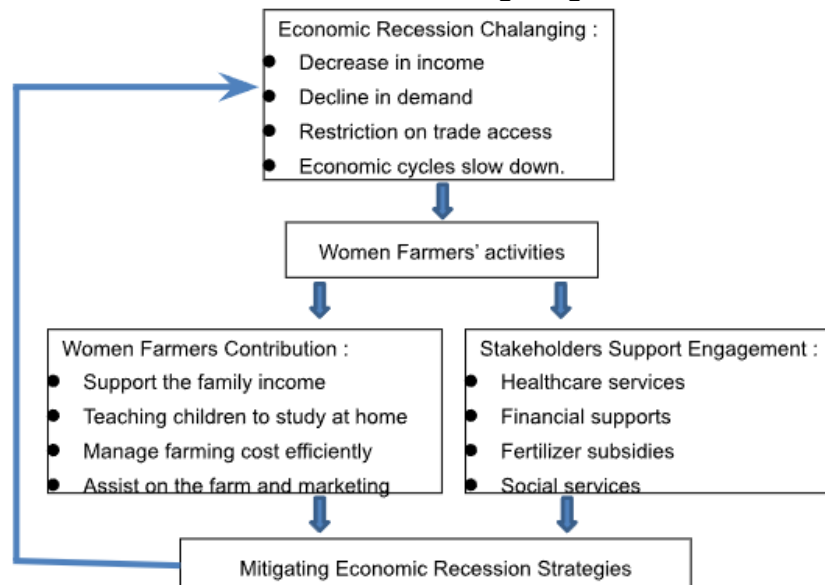


## Model of Women Farmers Contributions in Mitigating Economic Recession

The solution to mitigate the recession was identified through the problems and initiatives of women farmers. The main contribution of women farmers is a key strategy, including important stakeholders in addressing the economic challenges faced by individuals and their families during the recession. These mitigation techniques serve as a solution to address recession in rural areas and are anticipated to be implemented in other pandemic-affected areas, particularly those experiencing recessions (figure 1).

**Figure 5.**

Model of Women Farmers Contributions in Mitigating Economic Recession



The economic crisis challenges faced by women farmers during the pandemic encouraged them to show greater resilience in addressing various problems. Women farmers' diverse contributions, together with stakeholder support, assisted in the development of economic recession mitigation strategies.

## CONCLUSION

Economic recession impacts include decreasing income levels, slow economic activity caused by multiple factors, challenges in product marketing, and elevated health concerns related to COVID-19. The community continues to implement several strategies to address the recession, mostly by focusing on the agriculture sector and improving marketing efforts, facing challenges in obtaining advances in technology. The role of women during the pandemic is considered extremely important. Their primary contribution is teaching their children during the home learning program. Subsequently, strengthening the family economy during the recession and optimizing family financial management. The greatest contribution of women farmers in agricultural activities is the efficient management of agricultural costs, assistance in on-farm operations, and marketing efforts.

Stakeholders engaged in preserving the economic stability of agricultural households and rural communities. The obvious role of these various stakeholders is to provide financial aid, essential supplies, and healthcare services. The local government is the most important stakeholder in addressing the economic recession challenge. They are the most contributing due to their proximity and active collaboration with women farmers.

## REFERENCE

- Alvi, M., Barooah, P., Gupta, S., & Saini, S. (2021). Women's access to agriculture extension amidst COVID-19: Insights from Gujarat, India and Dang, Nepal. *Agricultural Systems*, 188(January), 103035. <https://doi.org/10.1016/j.agsy.2020.103035>
- Andrieu, N., Hossard, L., Graveline, N., Dugue, P., Guerra, P., & Chirinda, N. (2021). Covid-19 management by farmers and policymakers in Burkina Faso, Colombia and France: Lessons for climate action. *Agricultural Systems*, 190(February), 103092. <https://doi.org/10.1016/j.agsy.2021.103092>
- Armantier, O., Koşar, G., Pomerantz, R., Skandalis, D., Smith, K., Topa, G., & van der Klaauw, W. (2021). How economic crises affect inflation beliefs: Evidence from the Covid-19 pandemic. *Journal of Economic Behavior and Organization*, 189, 443–469. <https://doi.org/10.1016/j.jebo.2021.04.036>
- Canhoto, A. I., & Wei, L. (2021). Stakeholders of the world, unite!: Hospitality in the time of COVID-19. *International Journal of Hospitality Management*, 95(March), 102922. <https://doi.org/10.1016/j.ijhm.2021.102922>
- Coutiño, A., & Zandi, M. (2021). Global loss of production capacity caused by the COVID-19 pandemic. *Journal of Policy Modeling*, 43(3), 493–502. <https://doi.org/10.1016/j.jpolmod.2020.07.003>
- Donnell, M. O., Buvinic, M., Kenny, C., Bourgault, S., & Yang, G. (2021). *Promoting Women ' s Economic Empowerment in the COVID-19 Context Working Paper 575 April 2021. April 2021*, 1–70.
- Glocker, C., & Piribauer, P. (2021). The determinants of output losses during the Covid-19 pandemic. *Economics Letters*, 204, 109923. <https://doi.org/10.1016/j.econlet.2021.109923>
- Gulati, G., & Kelly, B. D. (2020). Domestic violence against women and the COVID-19 pandemic: What is the role of psychiatry? *International Journal of Law and Psychiatry*, 71(May), 101594. <https://doi.org/10.1016/j.ijlp.2020.101594>
- Heitkamp, D. E., Gupta, Y., & Patel, T. Y. (2020). Economic Recession From the COVID-19 Pandemic Signals Recruiting Difficulty Ahead for Radiology Residency Programs. *Current Problems in Diagnostic Radiology*, 49(6), 363–364. <https://doi.org/10.1067/j.cpradiol.2020.05.003>
- Huss, M., Brander, M., Kassie, M., Ehlert, U., & Bernauer, T. (2021). Improved storage mitigates vulnerability to food-supply shocks in smallholder agriculture during the COVID-19 pandemic. *Global Food Security*, 28(November 2020), 100468. <https://doi.org/10.1016/j.gfs.2020.100468>

- Ilesanmi, F. F., Ilesanmi, O. S., & Afolabi, A. A. (2021). The effects of the COVID-19 pandemic on food losses in the agricultural value chains in Africa: The Nigerian case study. *Public Health in Practice*, 2(February), 100087. <https://doi.org/10.1016/j.puhip.2021.100087>
- Joshi, T., Mainali, R. P., Marasini, S., Acharya, K. P., & Adhikari, S. (2021). Nepal at the edge of sword with two edges: The COVID-19 pandemics and sustainable development goals. *Journal of Agriculture and Food Research*, 4(November 2020), 100138. <https://doi.org/10.1016/j.jafr.2021.100138>
- Kringle, E., Skidmore, E., Carolyn Baum, M., Rogers, C., & Hammel, J. (2021). Social Learning in a Virtual Environment After Stroke: A Thematic Analysis Of Stakeholder Experiences During The COVID-19 Pandemic. *Archives of Physical Medicine and Rehabilitation*, 102(10), e74–e75. <https://doi.org/10.1016/j.apmr.2021.07.693>
- Landry, V., Semsar-Kazerooni, K., Tjong, J., Alj, A., Darnley, A., Lipp, R., & Guberman, G. I. (2021). The systemized exploitation of temporary migrant agricultural workers in Canada: Exacerbation of health vulnerabilities during the COVID-19 pandemic and recommendations for the future. *Journal of Migration and Health*, 3(November 2020), 100035. <https://doi.org/10.1016/j.jmh.2021.100035>
- Linden, K., Domgren, N., Zaigham, M., Sengpiel, V., Andersson, M. E., & Wessberg, A. (2021). Being in the shadow of the unknown — Swedish women's lived experiences of pregnancy during the COVID-19 pandemic, a phenomenological study. *Women and Birth*, September. <https://doi.org/10.1016/j.wombi.2021.09.007>
- Lopez-Ridaura, S., Sanders, A., Barba-Escoto, L., Wiegel, J., Mayorga-Cortes, M., Gonzalez-Esquivel, C., Lopez-Ramirez, M. A., Escoto-Masis, R. M., Morales-Galindo, E., & Garcia-Barcena, T. S. (2021). Immediate impact of COVID-19 pandemic on farming systems in Central America and Mexico. *Agricultural Systems*, 192, 103178. <https://doi.org/10.1016/j.agry.2021.103178>
- Mahfud, M. A. Z., Haryono, B. S., & Anggraeni, N. L. V. (2014). Peran Koordinasi Stakeholder Dalam Pengembangan Kawasan inapolitan Muhammad Ali Zuhri Mahfud , Bambang Santoso Haryono , Niken Lastiti Veri Anggraeni. *Jurnal Administrasi Publik (JAP)*, 3(12), 2070–2076.
- Marinova, G., & Aida, K. (2021). The Role of Women in the Digital Age : Balancing professional and The Role Women in the Digital Age : Balancing pandemic professional and personal challenges during Age : The Role Women in the professional and personal challenges during Age : the COVID-19 pandemic The Role Women in the professional and personal challenges during Aida the personal challenges during pandemic. *IFAC PapersOnLine*, 54(13), 539–544. <https://doi.org/10.1016/j.ifacol.2021.10.505>
- Mei, H., Li, N., Li, J., Zhang, D., Cao, Z., Zhou, Y., Cao, J., & Zhou, A. (2021). Depression, anxiety, and stress symptoms in pregnant women before and during the COVID-19 pandemic. *Journal of Psychosomatic Research*, 149(November 2020), 1–6. <https://doi.org/10.1016/j.jpsychores.2021.110586>



- Middendorff, B. J., Faye, A., Middendorff, G., Stewart, Z. P., Jha, P. K., & Prasad, P. V. V. (2021). Smallholder farmer perceptions about the impact of COVID-19 on agriculture and livelihoods in Senegal. *Agricultural Systems*, 190(February), 103108. <https://doi.org/10.1016/j.agsy.2021.103108>
- Mienur, M., Afrin, M., Islam, T., & Ali, M. (2021). Poultry farming and farmers perception towards the farming condition during COVID-19 pandemic in Bangladesh. *Journal of Agriculture and Food Research*, 6, 100239. <https://doi.org/10.1016/j.jafr.2021.100239>
- Pianta, S., Brutschin, E., van Ruijven, B., & Bosetti, V. (2021). Faster or slower decarbonization? Policymaker and stakeholder expectations on the effect of the COVID-19 pandemic on the global energy transition. *Energy Research and Social Science*, 76, 102025. <https://doi.org/10.1016/j.erss.2021.102025>
- Porter, G., Murphy, E., Adamu, F., Dayil, P. B., De Lannoy, A., Han, S., Mansour, H., Dungey, C., Ahmad, H., Maskiti, B., S, C., & Van der Weidje, K. (2021). Women's mobility and transport in the peripheries of three African cities: Reflecting on early impacts of COVID-19. *Transport Policy*, 110(February), 181–190. <https://doi.org/10.1016/j.tranpol.2021.05.025>
- Priestnall, S. L., Okumbe, N., Orenge, L., Okoth, R., Gupta, S., Gupta, N. N., Gupta, N. N., Hidrobo, M., Kumar, N., Palermo, T., Peterman, A., Roy, S., Konig, M. F., Powell, M., Staedtke, V., Bai, R. Y., Thomas, D. L., Fischer, N., Huq, S., ... Chatterjee, R. (2020). No 主観的健康感を中心とした在宅高齢者における 健康関連指標に関する共分散構造分析 Title. *Endocrine*, 9(May), 6. [https://www.slideshare.net/maryamkazemi3/stability-of-colloids%0Ahttps://barnard.edu/sites/default/files/inline/student\\_user\\_guide\\_for\\_spss.pdf%0Ahttp://www.ibm.com/support%0Ahttp://www.spss.com/sites/default/files/legacy/ProgDataMgmt\\_SPSS17.pdf%0Ahttps://www.nep](https://www.slideshare.net/maryamkazemi3/stability-of-colloids%0Ahttps://barnard.edu/sites/default/files/inline/student_user_guide_for_spss.pdf%0Ahttp://www.ibm.com/support%0Ahttp://www.spss.com/sites/default/files/legacy/ProgDataMgmt_SPSS17.pdf%0Ahttps://www.nep)
- Shibata, I. (2021). The distributional impact of recessions: The global financial crisis and the COVID-19 pandemic recession. *Journal of Economics and Business*, 115(October 2020), 105971. <https://doi.org/10.1016/j.jeconbus.2020.105971>
- Tutik, Noor, I., & Hayat, A. (2011). Peran Stakeholder Dalam Pengembangan Tebu Rakyat. *Jurnal Administrasi Publik (JAP)*, 2(5), 823–829.