



REVIEW ARTICLE

Kirkuk University Journal for Agricultural Sciences

ISSN:2958-6585

<https://kujas.uokirkuk.edu.iq>



<https://doi.org/10.58928/ku24.15403>

Some Downward Accountability Requirements In Agricultural Extension (Article Review).

Roaa Mohammed Hamid ¹

Hussian Khudair Al-Taiy ²

¹Department of Agriculture Extension and Transfer Technology, College of Agricultural Engineering Science, University of Baghdad, IRAQ.

¹Department of Agriculture Extension and Transfer Technology, College of Agriculture and Forestry, University of Mosul, IRAQ.

²Department of Agriculture Extension and Transfer Technology, College of Agricultural Engineering Science, University of Baghdad, IRAQ.

*Corresponding Author: ruaa.hamed2209p@coagri.uobaghdad.edu.iq.

Received: 26/06/2024

Revised: 17/07/2024

Accepted: 02/09/2024

Published: 01/12/2024

ABSTRACT

Downward accountability is crucial in agricultural extension to ensure services respond to farmers' needs and priorities and improve the quality of extension services to smallholder farmers. It enhances decision-making, increases transparency, improves agricultural productivity, increases farmer participation in program development, implementation, and evaluation, and addresses problems at lower levels. Achieving bottom-up accountability can be difficult and requires empowering the rural poor and marginalized groups to participate effectively. Extension services must be responsive and directly address farmers' needs. Downward accountability is an ongoing process and requires sustained effort and commitment. Extension workers keep farmers accountable for ensuring their services meet their needs, which was first implemented in the early 2000s. It has been used by agricultural extension programs, especially in developing countries. This is what was previously known as bottom-up evaluation, and it is almost absent in many extension systems, and there is no clear picture of it. Studies indicate that downward accountability is still limited and needs to be operationalized to enable farmers to participate in service operations and evaluations. Therefore, the article aims to identify the concept, types, importance, principles, challenges, mechanisms for holding farmers accountable, and the basic requirements for achieving accountability in agricultural extension. Some of the key requirements for downward accountability include governance structure, transparency, monitoring and evaluation, capacity development, sustained commitment, feedback mechanisms, demand-side financing, use of ICT, participatory approaches, and changes in extension systems. These requirements are necessary to activate bottom-up accountability in agricultural extension and enable farmers to request their needs from the services provided by the public sector to meet their challenges and achieve agricultural sustainability.

Keywords: downward accountability, upward accountability, quality serves, evaluation, agricultural extension.

Copyright © 2024. This is an open-access article distributed under the Creative Commons Attribution License.

INTRODUCTION

The agricultural sector in Iraq is facing significant obstacles in supplying agricultural products and ensuring food security [1]. The increasing demand for food due to higher human consumption and food industry growth has spurred extension organizations to update their systems and methods, as well as explore alternative strategies and policies to provide extension services for food security and overall economic development. Nations are committed to dedicating their resources to food production [2]. Agricultural extension plays a crucial role in improving and developing the agricultural sector, with a need for modernization and new approaches to meet the challenges faced in farm extension systems [3]. Agricultural extension systems were influenced by developments witnessed during the last two decades of the twentieth century if they faced major challenges in the farm extension systems. Therefore, the matter requires improving extension services, and that there be new roles exercised by the agricultural extension agency that are commensurate with the size of this challenge, represented by changing its methods, approaches, methods, and goals, and creating new partnerships [4]. Therefore, many studies have indicated that among the most important challenges facing extension systems are the following: [5] [6] [7] [8] [9] [10]

1. Loss of accountability mechanisms to customers.
2. Threats to the sustainability of agricultural systems include excessive use of external inputs on large-scale farms
3. The fragility of small farm ecosystems for many poor people.
4. Participatory approaches are the value extension systems to have been recognized since the middle of the last century.
5. Difficult working conditions associated with mentorship, requirements for additional responsibilities, funding challenges and extended service delivery, and erosion of political support.

These challenges and changes in the global context have had a significant impact on changing the outlook on agricultural extension, its concepts, and practices. [11]

One of the challenges in agricultural extension is managing extension personnel's service delivery at multiple sites. To improve results, it has been stressed in recent talks about agricultural extension that multiple stakeholders must be

involved. Although the responsibilities of service providers and beneficiaries have received most of the attention, it is equally critical to acknowledge the involvement of stakeholders who are not limited to donors and service providers. On the other hand, there hasn't been much discussion about the usefulness of accountability. It is widely understood that creating a channel for feedback, keeping an eye on behavior, and providing incentives are crucial elements in guaranteeing responsibility in a hierarchical relationship. [12] [13] [14]

Therefore, ensuring the provision of efficient rural services that meet the requirements of all farmers, men and women, especially the small and most vulnerable farmers, is essential to tackling the issues facing the agricultural sector and fostering inclusive growth in rural regions. Consequently, the following measures must be taken[15] :

1. Reconsidering extension systems that are market-driven and pluralistic standpoint
2. To align service providers from NGOs, producer organizations, and the private sector with the organizational and human capacities currently possessed by the public sector, it is important to identify clear organizational and accountability measures that govern the relationship between different actors within a pluralistic service system.
3. Improve rural extension and advisory service provider's ability to fully leverage ICT to deliver services, monitor performance, enhance accountability, and establish channels for service providers and users to communicate, express needs, offer feedback, and assess the quality of agricultural extension service, as follows: [16]
 1. The quality of extension service has a direct role in supporting, continuing, developing and improving the agricultural extension process.
 2. The quality of extension service gains its importance as it is a modern-day administrative system.
 3. The quality of the extension service contributes to enhancing the growers' desires for service, achieving them, and satisfying their needs.
 4. The quality of extension service contributes to enhancing the reputation of agricultural extension. Thus, responsibility for extension services is required to raise the caliber of services offered to farmers and address the issues in agriculture, such as food security and climate change. [17], especially downward accountability, as one of the factors in confronting the challenges facing agricultural extension systems in the world, to obtain good service and develop the services provided to farmers, considering that downward accountability is a practice. Since it is still limited and not widely used, certain conditions must be met to implement it in agricultural extension and raise the caliber and viability of the services offered to farmers[18] .

Therefore, this evaluation is still the official evaluation conducted by the organizations and departments concerned with their activities and programs, and the role of farmers in the evaluation is absent from it. [19] Therefore, calls began to increase from international organizations, conferences, and studies on the necessity of achieving an evaluation by farmers of the services provided to them regarding the feasibility, suitability, and quality of these services, and it became one of the evaluation approaches, and this is called the downward accountability. attention to the issue of quality for agricultural extension service is considered a fundamental requirement in achieving sustainable agricultural and rural development, achieving food security, and addressing the serious challenges facing the country [20]. The quality of extension service is one of the basic objectives of service organizations, including the agricultural extension organization and its ability to provide promising services. Accordingly, the great challenges in the current stage impose the necessity of improving agricultural extension services [21]. Therefore, the quality of agricultural services provided to farmers in our country requires an effective top-down approach. Accordingly, the article came to shed light on the concept of downward accountability, its types, importance, principles, and the most important requirements necessary for its activation, as follows:

1. The concept of downward accountability in agricultural extension:

In the early 2000s, "downward accountability" was first used in agricultural extension services. When extension agents are accountable to the farmers they assist, they may make sure that the services they offer meet their needs and interests. This is known as "downward accountability." This was driven by the desire to increase the efficiency and responsiveness of extension services to farmers' needs, as an International Food Policy Research Institute (IFPRI) study from 2002 indicated that to guarantee that agricultural extension services respond to farmers' needs, there must be downward accountability [22]. The term "accountability" has been increasingly prevalent in development practice and is now perhaps the main source of concern for funders and development managers. 'Accountability to ultimate beneficiaries—and potentially even to non-beneficiaries' is the definition of downward accountability, and it's becoming increasingly important. If an organization is to fulfill its mission and reach its full potential for effectiveness, it is likely that enforcing and guaranteeing the observance of fiduciary and bureaucratic norms of accountability—which usually flow 'upwards' from the field-based operator to state officials, their political superiors, and donors. A major factor in the increased interest in downward responsibility and participation is the understanding of the accountability gaps in traditional management and public administration paradigms, as well as the demand for development. [23] [24] [25] The concept of downward accountability has been adopted in various agricultural extension programs, especially in developing countries. In Uganda, a study was conducted in 2019 that used e-diaries as accountability tools in agricultural extension services to enhance downward accountability [26].

Therefore, downward accountability is a relatively recent concept, and it began to make its way into the literature of development, international organizations, and agricultural extension at the beginning of the twenty-first century. Accountability is also one of the concepts that has received much controversy in the circles and literature, perhaps because of its overlap with the term's measurement, evaluation, and inspection [27] .

it is necessary for monitoring and evaluating inputs, processes, and outputs to be done in a high-quality manner and based on realistic standards about the results and effects of those services. This evaluation is a systematic and objective process that is conducted for any ongoing or completed project, program, or policy, its design, implementation, and results [28].

Evaluation is an important term because it is completely linked to accountability. It is one of the most important processes that works to follow up and point out deficiencies, failures, and poor performance, and develop ways to develop them in the future to reach the desired results and compare them to the extent to which they achieve the goals [29]. It is the degree to which farmers are held accountable by extension services and are included in the formulation, execution, and assessment of extension programs [30]. The term "downward accountability" also describes the obligations and interactions a service provider has with its clients. Accountability is inextricably tied to governance and the degree to which users are involved in the highest echelons of system design and maintenance [31]. Ensuring the appropriateness and caliber of services and directing demand for them, along with the efficiency of services in fulfilling the request, is crucial. [32]

FAO & Kit referred to downward accountability in the context of agricultural extension, which refers to the procedures that make agricultural extension services answerable to the farmers they assist. In contrast, upward accountability is where services are responsible to their managers or funders [33].

2.Types of accountabilities:

Accountability can be classified according to the criterion of direction into two basic types, which include the following: [34] [35] [36]

1. Vertical accountability is divided into two types:

- **Accountability from the top to the bottom:** This is followed by most institutions that encourage broad cooperation by empowering individuals to work and promoting the goals of the organization. Accountability is adopted based on delegating agents at every level, and it is directed from the top to the bottom. This type is represented by (downward accountability), which includes holding farmers accountable to extension service providers at the lower level.

- **Accountability from the top to the top:** This process flows from the "top" to the next top, at every level of the organization, which is communication with superiors. This type is represented by upward accountability, it consists of the service provider's obligations and interactions with donors or bureaucratic hierarchies.

2. Horizontal accountability: which occurs between departments and their employees within the administrative formation horizontally.

3. The importance of downward accountability in agricultural extension:

The capacity of downward accountability to raise the standard and importance of extension services offered to smallholder farmers is what makes it so important. There are some reasons that downward accountability is important : [37]

1. **Improve decision-making:** By including smallholder farmers in the extension program development, execution, and assessment, downward accountability can improve decision-making in agricultural extension services
2. **Increase transparency:** downward accountability can increase transparency in agricultural extension services because it requires senior managers to be more open about their decision-making processes and provide more information to lower-level staff.
3. **Strengthen farmer participation:** Downward accountability is a way to strengthen farmer participation and give farmers more input into extension service decisions.
4. **Improving agricultural productivity:** downward accountability can improve agricultural productivity, because it allows problems and opportunities to be identified at lower levels of the organization, which can be addressed by extension service providers, and encourages the active participation of farmers
5. **Improving economic operations through:**
 - Strengthening the upward issue in the agricultural sector by improving the extension service
 - Developing infrastructure and providing training and continuing education for employees

4. Principles of downward accountability :

Principles of downward accountability include: [36]

1. **Accountability:** that individuals and organizations be accountable to the people to whom they provide services and support.
2. **Balancing power:** Accountability works to balance power to protect the most marginalized groups and those living in the most vulnerable situations and to support and enable rights holders to request information or actions taken through various mechanisms.
3. **Transparency:** Organizations must ensure transparency in their operations by providing accurate, timely and accessible information to stakeholders
4. **Participation:** It is imperative that stakeholders, including small farmers, play an active role in the development, execution, and assessment of projects and services.
5. **Access to information:** Stakeholders must have access to information regarding the performance and activities of service providers

6. **Monitoring and Evaluation:** Organizations must regularly monitor and evaluate their performance regarding downward accountability, using this information to identify areas for improvement and ensure that they are meeting their obligations to stakeholders

5. Challenges faced by agricultural extension services in achieving downward accountability: [38] [39]

1. Limited political and administrative decentralization: Because agricultural extension services are frequently centralized, smallholder farmers have less power to hold service providers accountable and to engage in decision-making processes.
2. Central human resources management: Because agricultural extension services are frequently run top-down, extension employees may find it more difficult to answer to smallholder farmers.
3. Many obligations: Agricultural extension services may have obligations to funders, government organizations, and other stakeholders, which may restrict their capacity to assist smallholder farmers.
4. Limited resources: The capacity of agricultural extension services to effectively assist smallholder farmers may be hampered by their lack of funding.
5. Unrealistic targets and an excessive workload: Extension personnel may have an unreasonable workload and an excessive workload, which could make it more difficult for them to oversee smallholder farmers.
6. Inadequate connections between extension, research, and farmers: Inadequate connections between extension services, research institutions, and smallholder farmers may limit the services' capacity to offer smallholder farmers pertinent and useful assistance.
7. Social norms: These include power disparities and cultural norms, which might affect stakeholders' capacity to hold service providers accountable, especially smallholder farmers.
8. Lack of openness: When it comes to the provision of services and support, a lack of transparency can impede accountability by making it more difficult for stakeholders to recognize and resolve problems about the caliber and responsiveness of service providers.
9. Inadequate complaint procedures: Inadequate complaint procedures can limit stakeholders' capacity to voice their issues and file complaints regarding the caliber and responsiveness of service providers.
10. Inadequate mechanisms for stakeholder participation: Inadequate methods for participatory processes can impede top-down accountability by obstructing significant chances for stakeholders, including smallholder farmers, to engage in the development, execution, and assessment of programs and services.

6. Farmers' involvement in the downward accountability system:

Non-governmental organizations and private service providers are thought to have a stronger track record of top-down accountability, and targets are permitted to participate in it through participatory decision-making and implementation processes (40). Institutions in the public and private sectors are concentrating on this trend due to the growing need for accountability (41).

The accountability of farmers by extension service providers depends on effective and participatory monitoring and evaluation. Non-scientific assessment lowers accountability performance because, for example, evaluators' focus on wealthy farmers negatively affects accountability outcomes. Increasing farmers' involvement in formal monitoring and evaluation requires doing the following: (42)

1. Including farmers in the process of developing extension services
2. Farmers' organizations' involvement in the service demand
3. Create a system that uses pertinent information and communication technology to support monitoring and assessment processes to improve quality assurance and transparency.
4. Give farmers the chance to comment on services and evaluate service providers' performance, improving the efficacy of top-down accountability.
5. Without a farmers' organization, it is challenging for farmers to keep service providers responsible and engage in the planning and execution of extension service systems. Because of this, service providers now concentrate on farmer-oriented strategies to boost farmers' ownership (visits and training, for example), promote back-to-back accountability, and encourage direct farmer participation in accountability.
6. Farmer empowerment is the process of improving the capacities of and enabling farmers to make appropriate choices, influence collective decisions and actions, and achieve the desired results based on those choices (43).

7. downward accountability some requirements:

Understanding the various factors that influence the process of achieving effective downward accountability in agricultural extension services is crucial. Research has highlighted several key elements essential in shaping the level of accountability within extension systems. Factors such as communication channels, power dynamics, institutional structures, and individual perceptions all play a significant role in the overall accountability framework. For instance, it is important to have clear communication pathways between farmers and extension agents to promote transparency and trust, which are vital components of downward accountability. Additionally, the importance of empowering farmers to actively partake in decision-making processes is stressed, as it can lead to increased accountability and responsiveness within extension services. By recognizing and addressing these influencing factors, agricultural extension programs can improve their downward accountability mechanisms and have a positive impact on rural communities [44].

The study by Lameck & Hulst indicated that among the most important requirements for achieving downward

accountability are [37] :

1. Decentralization and empowerment: Decentralization of decision-making and management of extension services can help empower farmers and communities to have a greater say in the direction of these services. This can include administrative and political decentralization, as well as participatory methods that actively involve farmers in the extension process
2. Feedback mechanisms: Creating mechanisms for farmers to provide feedback on the services they receive is an important part of downward accountability. This can include conducting regular surveys, focus groups and other consultation forms. Feedback collected through these mechanisms should be used to improve services and make them more responsive to farmers' needs
3. Monitoring and evaluation: Regular monitoring and evaluation of extension services can help evaluate their performance and impact from the perspective of the farmers they serve. This could include tracking bottom-up accountability indicators, such as the extent to which services respond to farmers' needs and priorities
4. Accountability relationships: Downward accountability involves creating relationships in which extension providers are accountable to the farmers they serve. This means that farmers must be able to hold extension providers accountable for their performance and the quality of the services they provide. [45]

While the study by Namyanya et al. stated that the requirements were as follows[46] :

1. Capacity building: Capacity building of extension providers and farmers is important to achieve accountability at the lower level. This could include training and other forms of capacity building aimed at enhancing the skills and knowledge necessary for effective management and accountability
2. Mobile programs: Enhancing local services for extension accountability, smartphone applications were used and allowed to evaluate and express their opinions regarding the extension services that farmers receive .

A study by McCollim showed that the most important requirements are[47] :

1. Transparency and information exchange: Extension services must be transparent regarding their objectives, activities, and impacts. This could include regularly exchanging information with farmers and other stakeholders about what services they do and how they perform. This transparency can help create an environment of accountability
2. Addressing power imbalances: There is often a power imbalance between extension service providers and the farmers they serve, especially smallholder farmers. Addressing this power imbalance is an essential part of achieving accountability at the lower level. This could include strategies to empower farmers and give them a greater voice in the extension process .

The study by Wongtschowski et al. indicated the most important requirements, which are as follows[19]:

1. Monitoring and evaluation
2. Establish accountability mechanisms
3. Accountability relationships

While FAO [48] and FAO&KIT.[33] mentioned a set of requirements represented as follows:

1. Monitoring, evaluation, and continuous improvement: Downward accountability is not a one-time achievement, but rather an ongoing process. There is a need for regular evaluation of accountability mechanisms and their impact on farmers, with continued efforts to strengthen and improve top-down accountability over time
2. Sustained commitment: Downward accountability is not a single event, but rather an ongoing process that requires ongoing commitment from all stakeholders. This includes the willingness of extension services to take responsibility and the ability of farmers to continue to exercise their rights and express their views
3. Create a multi-stakeholder governance structure that gives farmers and their organizations a voice in the development, implementation, monitoring, and assessment of extension services.
4. Implement mechanisms that let farmers negotiate for solutions, communicate their requirements, and use demand-side financing to pay for them.
5. Adopting participative methods that make farmers partners in the extension system, not just recipients.
6. Develop strong monitoring and evaluation systems that effectively engage farmers and local stakeholders, and generate accountability through regular reporting and analysis
7. developing the capabilities of both service providers and farmers. For farmers to have a voice and keep service providers responsible, capacity building is essential to improving professionalism in providing services, giving them the information they need to make decisions, and fostering a feeling of shared ownership.
8. Support the institutional and organizational growth of producer groups so that farmers can speak up more and choose the services they get. This will improve their capacity to assess the situation, make requests, and shape laws and policies .
9. Farmers and their organizations can actively engage in the process of bottom-up planning, design, and execution as well as the development of indicators, monitoring, and evaluation by being included in the governance structure of rural service delivery.
10. In agricultural extension performance management, proof of downward accountability to farmers can be demanded by donors, supervisors, or other responsible parties. In this way, upward accountability can help to support downward accountability.
11. Regulating the caliber of services. While the public sector is typically responsible for regulating quality, networks, associations, or producer organizations can also play this function. Enhancing the transparency of

service providers and educating the public about service quality is crucial .

The study by Blum et al. confirmed that the main requirements for accountability are [36]:

1. Multi-stakeholder governance structure
2. Strengthening demand-side financing mechanisms
3. Use participatory methods

The study by Saini et al. showed that among the requirements for downward accountability are [49] :

- Participatory approaches to agricultural extension, which place a strong emphasis on farmers' active involvement in the process, can aid in improving accountability at the local level. To boost output and enhance the standard of living in rural areas, these strategies frequently center on the requirements that farmers have voiced .

The study by Mbeche et al. indicated that the requirements for downward accountability are as follows [22] :

1. Clarifying expectations and standards: The first stage involves clearly defining what is expected of agricultural extension services in terms of their performance, behavior, and responsiveness to farmers' needs. This can be based on standards, policies, or agreements in place with farmers or their representatives
2. Correction and improvement: If problems or deficiencies are identified through monitoring and feedback, mechanisms must be in place to address these problems and improve the quality and responsiveness of extension services. This may involve disciplinary action in severe cases, but more often may entail corrective measures, additional training, or changes in service delivery methods .
3. Governance structure
4. Service delivery systems
5. Responding to farmers' needs
6. Financing extension services.

The study by Han and Hong indicated that one of the requirements for accountability is that the accountability process be based on the process of evaluating actual performance, and thus enhancing the level of accountability in the organization has a positive impact on the level. The performance of its employees, and for this reason policymakers in non-governmental organizations are interested in adopting the accountability process as a means to improve the efficiency and effectiveness of performance through monitoring and evaluating the behavior of mentors [34] .

In the study, Daivs explained that the requirements for downward accountability are: [50]

1. Platforms for the participation of beneficiaries of extension services have a role in enhancing accountability by sending messages about requests and evaluating services. It is important to activate information technology to improve accountability .
2. Digital tools are increasingly widespread to improve the accountability of service providers for their performance. Enhancing the use of digital platforms as procedures and instruments for extension service delivery is necessary to clarify demand and monitoring and boost accountability and transparency

Conclusion

There are many requirements for downward accountability in agricultural extension, and it is clear that there is no specific agreement on the requirements for downward accountability in agricultural extension because there is still a restriction. However, it is noted that most of them centered around requirements related to the enabling environment, transparency, monitoring and evaluation, capacity development, sustainable commitment, financing, use of communication and information technology, participatory approaches, and change. In extension and decentralization systems, The researcher believes that downward accountability requires intensive efforts from senior management and agricultural leaders to confront the challenges facing its implementation. The researcher agrees with the requirements mentioned above to achieve a qualitative shift in the extension services provided to farmers and thus will improve the quality of the extension service provided to farmers.

References

- [1.] Muhamad, J.A. (2015). The food problem in Iraq. challenges and effects, Iraqi Journal of Market Research and Consumer Protection, 8(1), 206-230.
- [2.] Al-Saadi, A. A. H. & Al-Badri, A. A. Z. (2022). Reality of the extension services provided to workers in vegetable production on farms belonging to the two holy shrines of Husseiniyya and Abbasiyya in the Holy province of Karbala, Journal of Iraqi Agricultural Sciences, 53(3) ,685-711.
- [3.] Qamar, K. (2005). Modernizing national agricultural extension systems: practical guide for policy-makers of developing countries, research extension and training division sustainable, development department food and agriculture organization of the united nations. Rome, Italy, by Information Division, FAO, Viale delle Termedi Caracalla, 00100 Rome, Italy or by e-mail to copyright@fao.org
- [4.] Al-Kubaisy, M. I, . and Lafta, Ahmed Hamdan. 2021. The Productive Obstacles in the Process of Marketing Agricultural Vegetables in Fallujah District. Annals of the Romanian Society for Cell Biology, 25(4), 14124-14134
- [5.] Axinn, George H.(1997) Challenges to agricultural extension in the twenty first century In Farmer Led Extension: concepts and practices, ed by Vanessa Scarborough et al. London, Intermediate Technology Publications .
- [6.] Alex, G., W. Zijp, and D. Byerlee, with input from the AKIS Thematic Team. (2002). Rural Extension And. Advisory Services: New Directions. Rural Strategy Background Paper No 9, World Bank, Washington D.C.
- [7.] Anderson, J. & Feder, G. (2003). Rural Extension Services. World Bank Policy Research Working Paper 2976, 10.1596/1813-9450-2976.

- [8.] Christoplos, I. (1996). Poverty, Pluralism and Extension Practice. Available at <https://www.iied.org/6112iied>
- [9.] Feder, G., Willet, A., & Zipp, W. (1999). Agricultural extension: generic challenges and some ingredients for solutions. Washington: World Bank. <https://doi.org/10.1596/1813-9450-2129>
- [10.] Nagel, U. Jens (1997). Alternative Approaches to Organizing Extension. In *Improving Agricultural Extension: A Reference Manual*. FAO: Rome .
- [11.] Garforth C., Harford C. (1997). Extension experiences in agriculture and natural resources management in the 1980's and 1990's. In: *Farmer-led Extension: Concepts and Practices*, Scarborough V, Killough S, Johnson DA and Farrington J (Eds.). London. Intermediate Technology Publications.
- [12.] Agyei, P. Antwi- Lindsay C. Stringer. (2021) Improving the effectiveness of agricultural extension services in supporting farmers to adapt to climate change: Insights from northeastern Ghana, - *Climate Risk Management*, Volume 32, ISSN 2212-0963, <https://doi.org/10.1016/j.crm.2021.100304>
- [13.] Maulu, S., Hasimuna, O.J., Mutale, B., Mphande, J., & Siankwilimba, E. (2021). Enhancing the role of rural agricultural extension programs in poverty alleviation: A review. *Cogent Food & Agriculture*, 7.
- [14.] Steinke, J., van Etten, J., Müller, A., Ortiz-Crespo, B., van de Gevel, J., Silvestri, S., & Priebe, J. (2020). Tapping the full potential of the digital revolution for agricultural extension: an emerging innovation agenda. *International Journal of Agricultural Sustainability*, 19(5–6), 549–565. <https://doi.org/10.1080/14735903.2020.1738754>
- [15.] FAO. (2022) Advancing rural advisory services to promote market orientation in Egypt – Making rural services work for small-scale farmers. Cairo. <https://doi.org/10.4060/cc1441en>
- [16.] Al-Haddad, A. I(2009), *Total Quality Management*, first edition, Dar Al-Fikr Publishers and Distributors, Amman, Jordan.
- [17.] Al-Taiy H. Kuhder ,Ashwak A. Al-bedry ,Beyan A. Ruda(2021) A Proposed Approach to Agricultural Extension in Iraq for a Better Response to the Needs of farmer's to Address Their Challenges, *Al-Muthanna Journal of Agricultural Sciences*, Volume (8), Issue.(3)
- [18.] Al-Taiy H. Kuhder . (2014). Suggested approach for reforming Agricultural extension system In Iraq. *Iraqi Agriculture Research Journal* (special issue), Volume 19, Issue 7.
- [19.] Wongtschowski, M., Oonk, L. and Mur, R. (2016). Monitoring and evaluation for accountability and learning. KIT Working Paper :3. <https://www.kit.nl/wpcontent/uploads/2018/08/Monitoring-and-evaluation-for-accountability-and-learning.pdf>
- [20.] AL-Taiy. H. K.(2013), Approach to improving the quality of disseminating agricultural technologies in Iraq, *Hewar AL-Fiker journal of Agricultural* 25-26PP8 .
- [21.] Al-Zaidi, M. J. M., and N. A. Abdul-Razzaq, 2016, Planning extension programs in light of total quality standards in some governorates of the central region of Iraq, *Iraqi Journal of Agricultural Sciences*, 47 (5) 1253-1246
- [22.] Mbeche, R. & Mose, G. & Ateka, J. (2021). The influence of privatised agricultural extension on downward accountability to smallholder tea farmers. *The Journal of Agricultural Education and Extension*. 28. 1-22. [10.1080/1389224X.2021.1932538](https://doi.org/10.1080/1389224X.2021.1932538).
- [23.] Namyanya, A. (2019) Strengthening accountability in public agricultural extension services: a case study from Uganda, dr.sc.ag by the faculty of agricultural sciences at the University of Hohenheim.
- [24.] Al-Khafaji, H. D. Mahdi (2007). Evaluating the Results of the National Program for the Development of Rice Cultivation in the Shalybian Regions of the Najaf and Diwaniyah Governorates, Master's Thesis College of Agriculture, University of Baghdad, Department of Agricultural Extension and Education
- [25.] Al Shabib, A. I. S. Muhammad (2021). Administrative accountability and its relationship to managing excellence for middle school principals in the city of Mosul from the point of view of their teachers, A Master thesis, Educational and Psychological Sciences, Educational Sciences, University of Mosul.
- [26.] Bebbington, J. & Unerman, J. (2020). Advancing research into accounting and the UN Sustainable Development Goals. *Accounting, Auditing & Accountability Journal*. ahead-of-print. [10.1108/AAAJ-05-2020-4556](https://doi.org/10.1108/AAAJ-05-2020-4556).
- [27.] Tamvada, M. (2020). Corporate social responsibility and accountability: a new theoretical foundation for regulating CSR. *International Journal of Corporate Social Responsibility*. 5. [10.1186/s40991-019-0045-8](https://doi.org/10.1186/s40991-019-0045-8).
- [28.] Al-Azizi, Issa bin Faraj, 2018, The effectiveness of using formative assessment in improving the level of academic achievement for the thinking skills and scientific research course among students of the College of Business Administration at Shaqra University, *Journal of the College of Basic Education for Educational and Human Sciences / University of Babylon*, No. 41.
- [29.] Wieringa, M.(2020). What to account for when accounting for algorithms: a systematic literature review on algorithmic accountability. In *Proceedings of the 2020 Conference on Fairness, Accountability, and Transparency (FAT* '20)*. Association for Computing Machinery, New York, NY, USA, 1–18. <https://doi.org/10.1145/3351095.3372833>
- [30.] Takahashi, K., Muraoka, R., & Otsuka, K. (2020). Technology adoption, impact, and extension in developing countries' agriculture: A review of the recent literature. *Agricultural Economics*, 51(1), 31–45. <https://doi.org/10.1111/agec.12539>
- [31.] Burlakoti M. and Nettle R. (2024) Analysis of the Impact of Devolution of the Agriculture
- [32.] Extension System in Nepal, *International Journal of Agricultural Extension and Rural Development Studies*, Vol.11, No.1, pp.1-20

- [33.] Yang,P.&Ou,y.2022.Transforming Public Agriculture Extension And Advisory Service Systems In Smallholder Farming:status quo,gaps,way forward. Rome. Fao. <https://doi.org/10.4060/cc2131en>
- [34.] Food and Agriculture Organization of the United Nations and Royal Tropical Institute Rome, 2016, New directions for inclusive Pluralistic Service Systems Report of FAO Expert Consultation (www.fao.org/publications)
- [35.] Han, Y. & Hong, S. (2019). The Impact of Accountability on Organizational Performance in the U.S. Federal Government: The Moderating Role of Autonomy. *Review of Public Personnel Administration*. 39. 3-23 .
- [36.] Abu Sharkh, D. Raafat, and Al-Aswad, F. Ali (2020) The degree to which secondary school principals in the Gaza governorates practice administrative accountability from the point of view of teachers and its relationship to some variables, *Journal of the Islamic University for Educational and Psychological Studies*, No. 22, pp. 52-78
- [37.] Blum, M.L., Cofini, F., Sulaiman, R.V. 2020. *Agricultural extension in transition worldwide: Policies and strategies for reform*. Rome, FAO
- [38.] Lameck, Wilfred & Hulst, Rudie. (2021). Upward and downward accountability in local government: the decentralization of agricultural extension services in Tanzania. *Commonwealth Journal of Local Governance*. 20-39. [10.5130/cjlg.vi25.6472](https://doi.org/10.5130/cjlg.vi25.6472)
- [39.] Sawandi, N., & Thomson, I. (2014). Broadening Corporate Accountability: An ‘Idealised’ Downward Accountability Model☆. *Procedia - Social and Behavioral Sciences*, 164, 429-436. DOI:10.1016/J.SBSPRO.2014.11.099Corpus ID: 144150917
- [40.] Fabregas R. Harigaya T.,Kremer M. ,Ramrattan R. (2023). Digital agricultural extension for development. In: Madon,T.,Gadgil,A.G.,Anderson,R.,Casaburi,I.,Lee,k.,Rezaee,A. (eds) *Introduction to development engineering*. Springer·cham. https://doi.org/10.1007/978-3-030-86065-3_8
- [41.] Bitzer,V.(2016). Incentives for enhanced performance of agricultural extension systems. Kit working paper6·. Amsterdam·kit. <https://www.kit.nl/wp-content/uploads/2018/08/incentives-for-enhanced-performance-of-agricultural-extension-systems.pdf>
- [42.] Klingebiel,S. Gonsior,V. Jakobs,F. & Nikitka,M. (2019). Where tradition meets public sector innovation: a rwandan case study for results-based approaches. *Third world quarterly*40·(7): 1340–1358.
- [43.] Hussein, T. M. A.(2023). Determinants of socio-economic and political empowerment of rural youth in the New Valley governorate, Egypt, *Journal of agricultural economics and Social Sciences*, 14 (7), 371-381.
- [44.] FAO ,(2020) *Agricultural extension in transition worldwide*. United Nations ,Food & AgricultureOrg.http://books.google.com/books?id=u3jgDwAAQBAJ&dq=Downward+accountability+agricultural+extension+factors+influence&hl=&source=gbs_api
- [45.] Heemskerk, W. & Nederlof, S. & Wennink, Bertus. (2008). Outsourcing agricultural advisory services: enhancing rural innovation in sub-Saharan Africa. *Annals of Clinical Microbiology and Antimicrobials - Ann Clin Microbiol Antimicrob*.
- [46.] Heller, I.(2022)Report on The Principle of Accountability·In the Context of The Realization of The Human Rights to Water and Sanitation·United Nations.
- [47.] Namyenya, A., Daum, T., Rwamigisa, P. B., & Birner, R. (2021). E-diary: a digital tool for strengthening accountability in agricultural extension. *Information Technology for Development*, 28(2), 319–345. <https://doi.org/10.1080/02681102.2021.1875186>
- [48.] McCollim, Elena, "A Tale of Two Influences: An Exploration of Downward Accountability in World Vision International" (2019). *Dissertations*. 155. <https://digital.sandiego.edu/dissertations/155>
- [49.] FAO. 2021. *Reforming and strengthening public agricultural extension and advisory service systems in smallholder farming*. Rome. <https://doi.org/10.4060/cb7908enn>
- [50.] Saini, Sushmita & Mallick, Sonali & Padhan, Smruti Ranjan. (2023). Participatory Extension Approach: Empowering Farmers. *Biotica Research Today*. 5. 326-328.
- Davis, K., & Heemskerk, W. (2012). Investment in extension and advisory services as part of

بعض متطلبات المساءلة التنازلية في الإرشاد الزراعي (مقالة مراجعة)

رؤى محمد حامد¹ حسين خضير الطائي²

¹ قسم الإرشاد الزراعي ونقل التقنيات، كلية علوم الهندسة الزراعية، جامعة بغداد، العراق.

² قسم الإرشاد الزراعي ونقل التقنيات، كلية الزراعة والغابات، جامعة الموصل، العراق.

² قسم الإرشاد الزراعي ونقل التقنيات، كلية علوم الهندسة الزراعية، جامعة بغداد، العراق.

الخلاصة

تعد المساءلة التنازلية أمراً بالغ الأهمية في الإرشاد الزراعي لضمان استجابة الخدمات لاحتياجات المزارعين وأولوياتهم وتحسين جودة خدمات الإرشاد للمزارعين أصحاب الحيازات الصغيرة. فهو يعزز عملية صنع القرار، ويزيد الشفافية، ويحسن الإنتاجية الزراعية، ويزيد من مشاركة المزارعين في تطوير البرامج وتنفيذها وتقييمها، ويعالج المشاكل على المستويات الأدنى. وقد يكون تحقيق المساءلة من القاعدة إلى القمة أمراً صعباً ويتطلب تمكين فقراء الريف والفئات المهمشة من المشاركة بفعالية. ويجب أن تكون خدمات الإرشاد سريعة الاستجابة وتلبي احتياجات المزارعين بشكل مباشر. فالمساءلة التنازلية هي عملية مستمرة وتتطلب جهداً والتزاماً متواصلين. ويُبقي عمال الإرشاد المزارعين مسؤولين عن ضمان تلبية خدماتهم لاحتياجاتهم، وهو ما تم تنفيذه لأول مرة في أوائل العقد الأول من القرن الحادي والعشرين. وقد تم استخدامه من قبل برامج الإرشاد الزراعي، وخاصة في البلدان النامية. وهذا ما كان يُعرف سابقاً بالتقييم من القاعدة إلى القمة، وهو يكاد يكون غائباً في كثير من أنظمة الإرشاد ولا توجد صورة واضحة عنه. وتشير الدراسات إلى أن المساءلة التنازلية لا تزال مقيدة وتحتاج إلى تفعيلها لتمكين المزارعين من المشاركة في عمليات الخدمة وتقييماتها. ولذلك، يهدف المقال إلى التعرف على المفهوم والأنواع والأهمية والمبادئ والتحديات وآليات مساءلة المزارعين، والمتطلبات الأساسية لتحقيق المساءلة في الإرشاد الزراعي. وتشمل بعض المتطلبات الرئيسية للمساءلة التنازلية ما يلي: هيكل حوكمة، الشفافية، الرصد والتقييم، تنمية القدرات، الالتزام المستدام، آليات التغذية الراجعة، التمويل من جانب الطلب، استخدام تكنولوجيا المعلومات والاتصالات، النهج التشاركية، والتغييرات في أنظمة الإرشاد. وتعد هذه المتطلبات ضرورية لتفعيل المساءلة التنازلية في الإرشاد الزراعي وتمكين المزارعين من طلب احتياجاتهم من الخدمات التي يقدمها القطاع العام وتقييمها حتى يتمكنوا من مواجهة تحدياتهم وتحقيق الاستفادة الزراعية.

الكلمات المفتاحية: المساءلة التنازلية، المساءلة التصاعدية، جودة الخدمة، التقويم، الإرشاد الزراعي.