

University extension as an agent of social transformation during the academic week of agricultural and environmental engineering

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Abstract. University extension acts as a bridge between the university and society, valuing popular knowledge and promoting social transformation through participatory practices. This study analyzed the role of extension as a transforming agent during the VIII Academic Week of Agricultural and Environmental Engineering, which brought together students, professors, professionals and companies in the agricultural sector in lectures, technical visits and integrative activities. The analysis of the extension actions revealed that the event favored dialog, the exchange of experiences and the strengthening of partnerships with companies, aligning with SDGs 2, 4 and 17 of the 2030 Agenda. It is concluded that extension, integrated with academic events, expands the social impact of the university and reinforces the union between teaching, research and extension in regional development.

Keywords: Higher Education, Local Development, Dialogic Relationship.

Introduction

Extension actions in Brazil emerged at the beginning of the twentieth century as a way to expand access to continuing education, especially for populations that were not linked to higher education (BONIFÁCIO & DOS SANTOS, 2020). University extension is consolidated as an instrument of the social commitment of institutions, although it still faces challenges in its effectiveness and interdisciplinary understanding (RODRIGUES et al., 2013). To overcome these challenges, dialog between universities and society is essential to meet social demands and promote joint development (DE PAULA, 2013).

In this sense, the extension enables significant experiences for students through activities such as lectures, mini-courses and technical visits, which stimulate critical thinking and strengthen academic training. Such actions generate positive impacts on the community,

contributing to social, economic and cultural development (DANTAS & GUENTHER, 2021).

In this context, the Agricultural and Environmental Engineering course at the Federal University of Rondonópolis promoted, in 2025, the VIII Academic Week of Agricultural and Environmental Engineering with the theme "Training of Professionals for the Smart and Sustainable Field". The event integrated teaching, research, extension and the productive sector, aligning with the Sustainable Development Goals (SDGs) of the UN 2030 Agenda, such as Zero Hunger and Sustainable Agriculture (SDG 2), Quality Education (SDG 4) and Partnerships and Means of Implementation (SDG 17).

Therefore, the objective of this project was to promote this integration and highlight the role of university extension as an agent of social transformation by offering a space for complementary training, critical reflection and

scientific and technological updating in the areas of agricultural and environmental engineering.

Methodology

The VIII Academic Week of Agricultural and Environmental Engineering was an event in which professors and students of the undergraduate course in Agricultural and Environmental Engineering were integral members of the organization team. The realization of this event was possible due to the protagonism of the students during the process of organizing and executing the event, who had the autonomy to make decisions about it.

The event was structured in three stages: prior organization, execution and monitoring/evaluation. The students actively participated in planning; defined thematic axes; selected speakers from different backgrounds, such as agricultural and environmental engineers, agronomists, biologists and researchers from partner institutions; brought an interdisciplinary and interprofessional character to the event; and verified the infrastructure needs.

The organization took place through meetings between professors and students in a participatory and democratic process. The choice of speakers considered the relevance of the themes, the diversity of backgrounds and the representativeness of different sectors (academic, public and private), ensuring the interdisciplinary and plural character of the VIII Academic Week of Agricultural and Environmental Engineering.

The execution stage consisted of carrying out the planned program, including the reception of speakers and participants. Monitoring and evaluation took place by listening to the participants, with the collection of opinions and suggestions via electronic forms. The analysis of extension as an agent of social transformation was based on indicators such as the number of participants, frequency of activities, perception of impacts, and collective reflection to validate perceptions and plan future actions.

Results and Discussion

The realization of university extension through the VIII Academic Week of Agricultural and Environmental Engineering strengthened the interaction between the university and society by promoting the direct contact of participants with professionals, researchers and companies in the agricultural sector. The activities stimulated student protagonism, citizen awareness and understanding of topics such as sustainability, precision agriculture and environmental management. The presence of speakers from different areas and institutions broadened the debate and inspired new professional perspectives. The lectures and technical visits strengthened the bond with the productive sector, creating opportunities for collaboration. University extension promotes dialog

with various segments of society and consolidates itself as a channel for the approximation and encouragement of partnerships (ALBRECHT & ABRAHÃO MONTEIRO BASTOS, 2020).

Additionally, the sharing of technical and scientific knowledge produced at the university during the academic week with the external community is emphasized, providing dialogical interaction through the performance of the participants of the event. This approach reinforces the role of the agricultural and environmental engineer as a transforming agent of society, capable of proposing technical solutions that reconcile economic development and preservation of natural resources.

With respect to the point of evaluation of the development of the university extension action as an agent of social transformation, the participation of 120 people was obtained; who effectively participated in the activities developed during the event and appropriated the knowledge available during it. Although qualitative evaluation instruments were not applied, it was possible to perceive the increase in social transformation through the interactions, discussions and spontaneous manifestations of the participants, a broadening of the critical look in relation to socioenvironmental challenges.

The knowledge acquired by the participants through the speeches through testimonies and dialogs with the teachers who accompanied the participants in the activities was observed. Many students showed interest in expanding their work in extension projects, showing an awareness of the importance of social and environmental responsibility in professional training. The event stimulated the feeling of belonging and the appreciation of the university's transformative role in society.

The strengthening with the external community took place through partnerships with companies in the agricultural sector in the region, in which they enabled opportunities to carry out supervised internships and partnerships to carry out research and innovation projects, which positively impacts the development and opportunities for future actions. In this context, the external demand is understood through university extension actions that make it possible to have the university as the main agent and with great potential to solve problems posed by the external community. Miguel (2023) noted that, through university extension, the teaching and research processes are renewed, the university's social reach is expanded, and the university's social reach is maintained.

The actions developed during the Academic Week were aligned with SDG 2 (Zero Hunger and Sustainable Agriculture), SDG 4 (Quality Education) and SDG 17 (Partnerships and Means of Implementation) by promoting awareness and encouraging practices aimed at sustainability and the common good.

Final considerations

The VIII Academic Week of Agricultural and Environmental Engineering highlighted the role of university extension as an agent of social transformation and the strengthening of the relationship between the university and the community. The event promoted the exchange of knowledge, scientific updating and integration between areas, and the development of technical, reflective and social skills.

Academic Week reinforced the inseparability between teaching, research and extension, bringing the academic environment closer to the demands of the agricultural sector and contributing to the training of ethical professionals, who are aware of and committed to sustainability. In this way, it has consolidated itself as a formative and transformative space, aligned with the Sustainable Development Goals of the 2030 Agenda.

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