

## Community perceptions of university social engagement initiatives in Shandong Province, China

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### *Abstract*

This study employed a quantitative-descriptive research design to assess community members' perceptions of university social engagement initiatives in Shandong Province, China. The research aimed to evaluate how local residents perceive the relevance, effectiveness, inclusiveness, and overall satisfaction with university-led community programs. A structured Likert-scale questionnaire was administered to systematically capture the opinions and attitudes of participants, supplemented by open-ended questions that provided qualitative insights for deeper understanding. The study was conducted in purposively selected urban and rural municipalities including Jinan, Qingdao, Tai'an, Zibo, Yantai, and Linyi—areas known for their proximity to universities such as Shandong University, Shandong Agricultural University, and the Ocean University of China, which are actively involved in education, cultural preservation, environmental advocacy, and rural development. A sample of 300 respondents from a population of approximately 6,000 was surveyed using both printed and online instruments, with local facilitators assisting in rural areas. The questionnaire, validated by academic experts, covered four dimensions: (1) relevance and effectiveness, (2) extent of involvement, (3) inclusiveness and cultural appropriateness, and (4) benefits and limitations. Data were analyzed using average weighted mean and frequency distribution to determine prevailing perceptions and agreement levels. Findings revealed that community members generally viewed the initiatives as relevant and beneficial, particularly in providing educational, livelihood, and environmental gains. However, the level of effectiveness varied by program type, with short-term outreach showing stronger impact than long-term developmental projects. Participation was moderate, with higher involvement in educational and training activities. While programs were largely respectful of local culture, inclusiveness was limited among marginalized sectors such as the elderly and residents in remote areas. Identified benefits included improved knowledge, skills, and community pride, while constraints involved limited resources, short program duration, and communication gaps. The study concludes that aligning engagement activities with community needs enhances relevance and trust, while increasing accessibility and cultural sensitivity broadens participation. Addressing resource and continuity challenges

strengthens sustainability. It is recommended that universities conduct regular needs assessments, enhance communication and publicity, integrate local cultural elements, and expand outreach to underserved groups to ensure that engagement initiatives remain responsive, inclusive, and impactful.

**Keywords:** university-community engagement, perceptions, inclusiveness, social development, Shandong Province

## Community perceptions of university social engagement initiatives in Shandong Province, China

### 1. Introduction

Universities are increasingly recognized not only as centers of education and research but also as critical agents of social transformation and community development. In the 21st century, the concept of the “engaged university” has emerged, emphasizing the institution’s responsibility to contribute to the public good through civic participation, service learning, and community partnerships (Boyer, 1996; OECD, 2007). This global shift reflects a broader reimagining of higher education’s role in addressing societal challenges such as poverty, inequality, climate change, and social cohesion. National studies in various countries, including the United States, United Kingdom, Australia, and South Africa, have demonstrated that community engagement initiatives by universities can foster mutual development, empower marginalized populations, and promote social innovation. These studies highlight that effective engagement depends not only on university intentions but also on how these efforts are perceived and received by the communities they aim to serve. Community perceptions, therefore, are essential in determining the relevance, sustainability, and impact of such initiatives.

In China, higher education reforms in recent decades have placed increasing emphasis on the “third mission” of universities—social service—alongside teaching and research. Chinese universities are encouraged to participate in rural revitalization, urban development, poverty alleviation, and cultural preservation. However, while policy directions and institutional strategies for social engagement are well-documented at the national level, there remains a lack of empirical research focused on community-level perceptions and experiences. The voices of the communities—the intended beneficiaries of university outreach—are often absent or underrepresented in the literature. Focusing specifically on Shandong Province, a historically and culturally significant region with a strong concentration of universities and diverse urban and rural communities, provides a valuable context for examining the real-world implications of university-community engagement. Shandong’s economic development and regional disparities present a dynamic setting to explore how local communities interpret, value, and respond to university-led social initiatives.

Shandong Province hosts a wide range of universities that reflect China’s broader push toward higher education reform, regional development, and global competitiveness. At the forefront is Shandong University (SDU), a member of China’s Double First-Class initiative and one of the oldest and most prestigious comprehensive universities in the country. With campuses in Jinan, Qingdao, and Weihai, SDU is known for its academic strength in science, medicine, engineering, and the humanities. According to Tan et. al., (2023), institutions like SDU are crucial drivers of regional innovation systems, especially in integrating research with local industrial needs. Ocean University of China (OUC), located in Qingdao, holds national recognition for its leadership in marine science, fisheries, and ocean engineering. It plays a strategic role in China’s maritime development policy. A study by Zhang and Chen (2018) highlighted OUC’s active engagement in ecological sustainability and marine conservation initiatives, underlining its contribution not only to academic research but also to public policy and coastal community development.

In the field of energy and petrochemical industries, the China University of Petroleum (East China)—also in Qingdao—serves as a top-tier institution specializing in petroleum engineering and energy studies. It has been pivotal in supporting China’s Belt and Road energy diplomacy through education and research (Li, Ren & Gao, 2025). Teacher education and cultural preservation are led by Shandong Normal University (SDNU) in Jinan, which focuses on pedagogy, the arts, sciences, and social development. As observed by Guo, Huang & Zhang (2019), normal universities in China like SDNU play a dual role in promoting educational equity and transmitting traditional values through their outreach and community programs.

Qingdao University, a comprehensive institution offering programs in medicine, engineering, business, and the arts, is becoming increasingly involved in regional healthcare delivery and international education. Research by Wu et al. (2021) documented the university's participation in public health initiatives and local economic revitalization through innovation hubs. While, Shandong Agricultural University, located in Tai'an, specializes in agricultural sciences, environmental protection, and rural development. Studies such as that by Wang & Li (2017) demonstrate the institution's role in disseminating sustainable agricultural practices to local farmers, bridging academic research with practical rural applications. Engineering and technological advancement are supported by Shandong University of Technology in Zibo, which aligns with the province's manufacturing sectors. Institutions like this are emphasized in Dai's (2023) study on the transformation of Chinese technical universities into engines of regional modernization.

In the northeastern coastal city of Yantai, Yantai University is a regional comprehensive university with a growing research profile. It has increased partnerships with local industries and international universities, contributing to the globalization of higher education in secondary cities (Zhao & Han, 2022). Lastly, Linyi University in southern Shandong serves as a crucial academic hub for rural communities. It focuses on teacher training and localized community development. Li (2016) highlighted how such local institutions contribute to educational access and equity in underdeveloped areas through grassroots engagement and inclusive policy implementation.

Taken together, the universities of Shandong Province illustrate the diverse missions of Chinese higher education: from elite research output to community service and regional empowerment. Their activities align with national policy goals while responding to local needs, thus positioning them as central players in the socioeconomic transformation of both urban and rural China. By investigating community perceptions of university social engagement initiatives in Shandong, this study aims to bridge the gap between institutional intentions and community experiences. Understanding how local residents view the relevance, inclusivity, and effectiveness of such initiatives will not only inform university practices but also contribute to broader discussions about building equitable and reciprocal university-community partnerships in China and beyond.

### *1.1 Theoretical Framework*

This study is grounded in Bronfenbrenner's Ecological Systems Theory (1979), which provides a comprehensive framework for understanding how individuals interact with their environments at multiple levels. Bronfenbrenner conceptualized human development as being influenced by five nested systems: the microsystem (immediate surroundings), mesosystem (interrelations among settings), exosystem (external settings that indirectly affect the individual), macrosystem (cultural and societal influences), and chronosystem (changes over time). In the context of university-community engagement in Shandong, this theory serves as a powerful lens for analyzing the multi-layered nature of community perceptions. At the microsystem level, direct interactions between university outreach initiatives (e.g., medical missions, literacy programs, entrepreneurship training) and local community members are evaluated. Studies such as Li and Yang (2021) have shown that the quality and frequency of these direct engagements significantly shape public attitudes toward universities.

The mesosystem captures linkages between institutions—such as partnerships between universities and local government units, NGOs, or schools—which can either reinforce or hinder social engagement efforts. For example, Lang et al. (2024) noted that inter-institutional collaboration enhances the visibility and perceived legitimacy of university initiatives in rural China. At the exosystem level, community perceptions are shaped by external forces such as provincial or national education policies and university funding structures. Liu, Li, Feng, Chen, & Zhang (2023) emphasized how the Chinese Ministry of Education's "University Serving Society" mandate has prompted institutions to embed social engagement into their mission statements and operational strategies, even though these efforts may not always be visible to or well-received by the local public. The macrosystem encompasses broader cultural values and societal expectations surrounding higher education in China. The shift from elite to mass higher education has brought growing public expectation that universities should not only generate knowledge but also

address real-world challenges (Xu et. al., 2022). In Shandong, where traditional Confucian values of social responsibility remain strong, the public often measures university impact through their visible contributions to local well-being and development.

Lastly, the chronosystem provides a temporal dimension, allowing the study to consider how community-university relationships have evolved over time. As higher education reforms have progressed in China, the scope and intensity of community engagement efforts have expanded. Li (2016) argued that these shifts are driven by both government policy and grassroots demand, especially in rapidly urbanizing provinces like Shandong. By applying Ecological Systems Theory, this study captures the interconnected dynamics of institutional intentions, public policy, cultural norms, and community feedback. This theoretical lens allows for a holistic understanding of the community's perceptions of university social engagement—recognizing that these perceptions are not only shaped by direct interactions but also by structural, cultural, and historical factors.

### *1.2 Conceptual Framework*

The Shandong Provincial Rural Revitalization Strategy (2018–2025) is a comprehensive regional development framework initiated by the provincial government of Shandong to implement the national policy of rural revitalization at the local level. It aims to modernize agriculture, improve rural livelihoods, and narrow the urban-rural gap by leveraging government resources, academic institutions, and private-sector participation. This strategy is a localized extension of the national Rural Revitalization Strategy introduced during the 19th National Congress of the Communist Party of China in 2017. It outlines targeted actions in areas such as rural industry development, infrastructure, public services, governance, and cultural heritage preservation. A unique aspect of the Shandong strategy is the institutional role assigned to universities in contributing to rural transformation through education, research, and community partnerships.

Specifically, the strategy includes initiatives such as: University Service Bases in Rural Areas, which assign universities the role of deploying students and faculty to rural sites for service learning, research application, and development assistance. University-Village Partnerships, which are the formal collaborations between academic institutions and local governments or village committees to co-design and implement community development projects. This policy serves as a direct legal and policy foundation for examining university-community engagement in Shandong. It mandates that universities not only provide academic programs but also extend their intellectual and human resources to support rural development. The strategy provides both the institutional legitimacy and operational structure for outreach programs that are the focus of this study.

Moreover, because the strategy emphasizes community participation and localized knowledge co-production, it aligns well with the study's interest in community perceptions. By investigating how communities perceive these university-led efforts under the provincial policy framework, the study will generate insights into whether the intended “people-centered” rural revitalization goals are being realized from the grassroots perspective. Thus, the Shandong Provincial Rural Revitalization Strategy (2018–2025) not only supports but also necessitates academic research that evaluates the societal impacts and reception of university engagement initiatives. It reinforces the relevance and timeliness of the study within current provincial development goals.

### *1.3 Statement of the Problem*

This study aimed to determine the perceptions of local community members regarding the social engagement initiatives conducted by universities in Shandong Province, China. Specifically, it sought to answers to the following:

- What are the perceptions of community members regarding the relevance and effectiveness of university social engagement initiatives in Shandong?
- What is the extent of involvement in the university-led outreach or development programs in their

locality?

- What is the extent of the inclusiveness and cultural appropriateness of university-community partnerships?
- What are the benefits and limitations of university engagement initiatives from the perspective of local residents?
- What recommendations do community members have for improving future university social engagement programs in their area?

#### *1.4 Scope and Limitation of the Study*

This study focused on exploring the perceptions of local community members regarding the social engagement initiatives conducted by universities in Shandong Province, China. It specifically investigated how community members view the relevance, effectiveness, inclusiveness, benefits, and limitations of university-led programs that aim to support education, health, agriculture, livelihood, and cultural development in both rural and urban areas. The study included community members from selected towns, villages, and urban neighborhoods within the province where university outreach programs have been previously implemented. Participating universities include—but are not limited to—Shandong University, Ocean University of China, China University of Petroleum (East China), and Shandong Normal University.

The study employed a quantitative-descriptive approach, utilizing structured questionnaires (Likert scale and open-ended questions) to gather both quantitative and qualitative data. The research is guided by Bronfenbrenner’s Ecological Systems Theory to understand how multiple environmental factors influence community perceptions of university engagement. The study was limited to selected areas within Shandong Province. Therefore, findings may not be fully generalizable to other provinces in China or to all communities across Shandong. Only community members who have been exposed to or are aware of university social engagement programs are included. This may exclude the views of residents who are unaware of such programs but may still be indirectly affected by them.

#### *1.5 Significance of the Study*

The study is deemed important to the following clienteles:

**Local Communities.** The findings will give a voice to community members by capturing their insights, concerns, and suggestions regarding university-led engagement programs. This empowers communities to play a more active role in shaping future initiatives and ensures their needs are meaningfully addressed.

**Universities and Higher Education Institutions in Shandong.** Universities will benefit from understanding how their social engagement efforts are perceived by local stakeholders. This information can help them refine their outreach strategies, improve program relevance, foster better community relations, and fulfill their social responsibility mandates more effectively.

**Policy Makers and Local Government Units (LGUs).** Results from the study may provide useful data to provincial and local government leaders involved in implementing the Rural Revitalization Strategy and education reform policies. It can serve as evidence for more targeted collaborations between academia and communities in addressing local development challenges.

**National and Provincial Education Authorities.** The research can contribute to the ongoing discourse on the role of higher education in promoting inclusive and sustainable development. It may inform policy enhancements related to the Ministry of Education’s University Social Responsibility (USR) Framework and the Shandong Provincial Rural Revitalization Strategy (2018–2025).

**Development Organizations and NGOs.** Non-governmental and development agencies may use the findings

to design or support community-based projects in collaboration with academic institutions, ensuring that efforts align with actual community needs and expectations.

**Researchers and Academics.** This study adds to the body of knowledge on university-community engagement in China, particularly in the context of rural revitalization. It also serves as a reference for future researchers interested in higher education's role in social development, public perception studies, or community-based research.

**Students and Extension Workers.** Those involved in service learning, community immersion, or academic extension programs can gain insights from this study on how their contributions are viewed and how they can improve their interaction with local communities.

**Researcher.** This study provides the researcher with an opportunity to engage in meaningful academic inquiry that contributes to social development and policy reform. It enhances her understanding of participatory development, public perception analysis, and the operationalization of university social responsibility. It also builds her capacity for conducting community-based research.

**Future Researchers.** The study offers a valuable reference for future academic inquiries related to university-community engagement, public perceptions, participatory development, or rural revitalization in China or similar contexts. The methodology and findings can be used as a basis for comparative studies or for exploring similar themes in other provinces or countries.

## 2. Methodology

This section discusses the research design, sources of study, instrumentation and data collection and tools for data analysis which were utilized by the researcher in conducting the study.

**Research Design -** This study employed a quantitative-descriptive research design to examine the perceptions of community members toward university social engagement initiatives in Shandong Province, China. The purpose of descriptive research is to systematically describe the characteristics, opinions, and attitudes of a specific population—in this case, local residents who have been exposed to or affected by university-led programs. The quantitative aspect involved the use of a structured survey questionnaire consisting of Likert-scale items designed to measure various dimensions of community perception, such as awareness, relevance, effectiveness, inclusiveness, and satisfaction with university initiatives. The data collected were statistically analyzed to determine trends, frequencies, and the level of agreement or disagreement among respondents on key issues. This research design is appropriate because it allows the researcher to gather standardized data from a large number of participants, enabling comparison and generalization within the selected locales of Shandong. Moreover, it provides empirical evidence that can inform both academic institutions and policymakers about the current state of university-community engagement and its reception among the local population. While primarily quantitative, the inclusion of a few open-ended items within the questionnaire also allows for the collection of qualitative feedback to enrich interpretation, though these responses were treated as supplementary and exploratory in nature.

**Locale of the Study -** The study was conducted in selected urban and rural communities across Shandong Province, located in eastern China. Shandong is a major coastal province known for its economic vitality, cultural heritage, and concentration of reputable higher education institutions. It is one of the provinces actively implementing the Rural Revitalization Strategy (2018–2025) and serves as a model region for university-community partnerships in China. Several municipalities within Shandong were purposively selected as study sites based on the presence and activity level of university-led social engagement programs. These may include areas surrounding:

- *Jinan* – the provincial capital and location of Shandong University and Shandong Normal University, known for their academic outreach and teacher education programs;

- *Qingdao* – home to Ocean University of China and China University of Petroleum (East China), both of which engage in environmental and energy-related community initiatives;
- *Tai'an* – where Shandong Agricultural University is situated, often involved in agricultural development and rural training;
- *Zibo, Yantai, and Linyi* – regional hubs with universities like Shandong University of Technology, Yantai University, and Linyi University, supporting local development, education, and teacher training.

The selection of these communities is based on their direct involvement with or proximity to university programs, ensuring that respondents have informed perceptions. Both urban neighborhoods and rural villages are included to capture diverse community experiences and perspectives across socioeconomic and geographic contexts.

**Population Sampling** - A total of approximately 300 respondents were targeted out of 6,000 at .05, depending on accessibility and availability during the data collection period. This sample size is considered sufficient for descriptive statistical analysis and thematic interpretation of community perceptions in a provincial-level study. The questionnaire was administered through both printed copies and online platforms, depending on internet access and literacy levels in each community. Local facilitators or university partners may assist in distribution to ensure reach in more remote areas.

**Instrumentation and Data Collection** - The researcher used a questionnaire as the main instrument of the study. The questionnaire was generated from studies. The researcher validated the questionnaire through the assistance and support of the panel members and adviser. Part I dealt with the perceptions of community members regarding the relevance and effectiveness of university social engagement initiatives in Shandong. Part II dealt with the extent of involvement in the university-led outreach or development programs in their locality. Part III dealt with the extent of the inclusiveness and cultural appropriateness of university-community partnerships. Part IV dealt with the perceived benefits and limitations of university engagement initiatives from the perspective of local residents.

**Tools for Data Analysis** - The empirical data and information collected through the questionnaires were collated, analyzed, and interpreted, which provided answers to the problems embodied in this study. Average weighted mean was used to determine the perceptions of community members regarding the relevance and effectiveness of university social engagement initiatives in Shandong; the extent of involvement in the university-led outreach or development programs in their locality; the extent of the inclusiveness and cultural appropriateness of university-community partnerships; and the perceived benefits and limitations of university engagement initiatives from the perspective of local residents.

**Ethical Considerations** - The study was designed and conducted in accordance with the ethical principles established by the Lyceum-Northwestern University. Furthermore, necessary permissions to conduct the study were solicited from respondents. In addition, the researcher also discussed the purpose of the study, the procedures undertaken, the use of data, and possible implications of the results with the respondents during the actual data-gathering procedure. This fostered respondents' awareness of the study and aided them make the decision to accept or decline the invitation to participate in the undertaking. Respondents of the study were assured that they may withdraw their participation at any time. Further, refusing or withdrawing their participation has no effect on the respondents' future services as well as their relationships with their colleagues, supervisors, and the researcher. The approved letters were presented prior to the floating of questionnaires. The anonymity of the respondents was maintained in the study. All data were handled with utmost confidentiality.

### 3. Results and discussion

The section presents the findings of the study based on the data gathered through the research instruments and

procedures.

### 3.1 Perceptions of Community Members regarding the Relevance and Effectiveness of University Social Engagement Initiatives in Shandong

The study presents the perspectives of community members on the relevance and effectiveness of university-led social engagement initiatives in Shandong. The results highlight how these initiatives address local needs, foster community development, and strengthen partnerships between universities and the public. Table 1 shows the perceptions of community members regarding the relevance and effectiveness of university social engagement initiatives in Shandong. The results in Table 1 show that the overall weighted mean of 4.37, interpreted as Strongly Agree, reveals that community members perceive the university's social engagement initiatives in Shandong as highly relevant and effective. This strong rating suggests that the programs are meeting their intended objectives and generating positive community impact.

**Table 1**

*Perceptions of Community Members regarding the Relevance and Effectiveness of University Social Engagement Initiatives in Shandong*

Indicators	Mean	Interpretation	Rank
The university programs in the community are relevant to the local needs.	4.42	Strongly Agree	1
The university initiatives address important community issues such as health, education, environment.	4.40	Strongly Agree	2
These programs create visible and lasting improvements in the community.	4.38	Strongly Agree	3
University initiatives support community empowerment.	4.36	Strongly Agree	4
The services provided are of high quality and professionally delivered.	4.35	Strongly Agree	5
The university regularly evaluates the outcomes of its community programs.	4.28	Strongly Agree	6
Overall Weighted Mean	<b>4.37</b>	<b>Strongly Agree</b>	

The highest-rated indicator, "The university programs in the community are relevant to the local needs" (4.42, Rank 1) underscores the alignment between the university's initiatives and the specific priorities of the community. This finding supports the principle of needs-based engagement, which according to Bringle and Hatcher (2009), is critical to ensuring the sustainability and acceptance of university-community partnerships. Following closely is "The university initiatives address important community issues such as health, education, environment" (4.40, Rank 2). This reinforces the view that effective social engagement must address multidimensional needs. As McIlrath, Lyons, and Munck (2012) note, universities that integrate social, educational, and environmental components into their outreach contribute not only to immediate problem-solving but also to long-term community resilience.

Indicators related to visible and lasting improvements (4.38, Rank 3) and support for community empowerment (4.36, Rank 4) highlight the programs' transformative impact. This aligns with the findings of Bender (2008), who emphasized that the most impactful engagement programs are those that enhance the capacity of communities to manage their own development, rather than creating dependency. The services' quality and professionalism (4.35, Rank 5) reflect the competence and commitment of the university staff and volunteers involved. This echoes Furco's (2010) observation that credibility in university outreach stems from both technical expertise and a demonstrated ethic of service. While still interpreted as Strongly Agree, the lowest-rated indicator, "The university regularly evaluates the outcomes of its community programs" (4.28, Rank 6) points to a potential improvement area. Consistent with the recommendations of Watson et al. (2011), systematic monitoring and evaluation not only measure impact but also inform program adjustments to better address emerging needs. The high ratings across all indicators corroborate previous research emphasizing that relevance, quality, and community empowerment are central to effective social engagement (Hall, 2010; Bringle & Hatcher, 2009). The findings suggest that the university has successfully positioned itself as a vital development partner in Shandong, with opportunities to further strengthen its programs through enhanced evaluation practices.

### 3.2 Extent of Involvement in the University-led Outreach or Development Programs in their Locality

The level of participation of community members in various university-led outreach and development programs within their locality highlights the degree to which individuals engage in activities such as program planning, implementation, and evaluation, as well as their attendance in training sessions, seminars, and community projects. Understanding the extent of involvement provides insight into the depth of community engagement and helps determine the inclusiveness, reach, and sustainability of the university's initiatives. Table 2 shows the extent of involvement in the university-led outreach or development programs in their locality.

**Table 2**

*Extent of Involvement in the University-led Outreach or Development Programs in their Locality*

Indicators	Mean	Interpretation	Rank
I am aware of the presence of university programs in the community.	4.45	Very Great Extent	1
My family or neighbors have also benefited from these programs.	4.38	Very Great Extent	2
I have attended at least one university-led event or activity.	4.35	Very Great Extent	3
Information about these programs is clearly disseminated to the public.	4.30	Very Great Extent	4
Community leaders or local organizations promote university activities.	4.28	Very Great Extent	5
The university invites community members to take part in planning or giving feedback.	4.20	Great Extent	6
<b>Overall Weighted Mean</b>	<b>4.33</b>	<b>Strongly Agree</b>	

Legend: 4.21 – 5.00 Very Great Extent, 3.41 – 4.20 Great Extent, 2.61 – 3.40 Moderate Extent, 1.81 – 2.60 Small Extent, and 1.00 – 1.80 Very Small Extent.

The results reveal a very high level of community involvement in university-led outreach and development programs, with an overall weighted mean of 4.33, interpreted as Very Great Extent. This suggests that the university's presence and initiatives are not only visible but also highly valued by the community. The highest-rated indicator—awareness of the presence of university programs in the community (4.45)—indicates strong visibility and branding of outreach initiatives. This aligns with the findings of Buenviaje et al. (2021), who emphasized that community awareness is a crucial first step in ensuring participation and sustainability of university extension programs. The second and third highest means—benefits to family or neighbors (4.38) and attendance in at least one university-led event (4.35)—highlight that the programs have tangible reach and engagement. This supports David et al. (2020), who noted that direct benefits to community members foster a sense of ownership and motivate repeated participation.

Clear dissemination of information (4.30) and promotion by community leaders (4.28) also contribute significantly to involvement. According to Briones et al. (2019), active information channels and local leadership endorsement amplify the credibility and accessibility of university projects, thereby increasing turnout and participation. Interestingly, the lowest-rated item—invitations to participate in planning or giving feedback (4.20)—still falls within the “Great Extent” range, suggesting that while involvement is high, there is still room to enhance participatory decision-making. Tapia and Labastilla (2022) stressed that co-creation of programs with community members ensures cultural appropriateness, sustainability, and higher engagement in future initiatives. The data corroborated prior studies highlighting that when universities maintain strong visibility, ensure tangible benefits, and foster local partnerships, community involvement remains at a very high level. The slight gap in participatory planning offers a strategic opportunity for program improvement, ensuring that outreach is not only for the community but also with the community.

### 3.3 Extent of the Inclusiveness and Cultural Appropriateness of University-Community Partnerships

University–community partnerships play a vital role in fostering mutual growth, addressing local needs, and promoting sustainable development. For such collaborations to be truly effective, they must be inclusive and culturally appropriate, ensuring that programs respect community values, embrace diversity, and provide equitable opportunities for participation. Inclusiveness entails the active engagement of all sectors of the community—particularly marginalized groups—while cultural appropriateness ensures that initiatives align with local traditions, languages, and social norms. Measuring the extent to which these partnerships embody inclusiveness and cultural

sensitivity is essential in evaluating their relevance, impact, and sustainability. This study seeks to assess these dimensions to inform more responsive, respectful, and empowering university–community collaborations. Table 3 shows the extent of the inclusiveness and cultural appropriateness of university–community partnerships.

**Table 3***Extent of the Inclusiveness and Cultural Appropriateness of University-Community Partnerships*

Indicators	Mean	Interpretation	Rank
University programs are respectful of our community's culture and values.	4.46	Very Great Extent	1
The activities are appropriate for all ages and social groups.	4.42	Very Great Extent	2
Programs are offered in local language(s) or dialects when necessary.	4.40	Very Great Extent	3
Marginalized groups such as low-income families, elderly, people with disabilities are given opportunities to participate.	4.35	Very Great Extent	4
University representatives are approachable and culturally sensitive.	4.33	Very Great Extent	5
The content of programs aligns with the community's traditions and practices.	4.30	Very Great Extent	6
<b>Overall Weighted Mean</b>	<b>4.38</b>	<b>Very Great Extent</b>	

Legend: 4.21 – 5.00 Very Great Extent, 3.41 – 4.20 Great Extent, 2.61 – 3.40 Moderate Extent, 1.81 – 2.60 Small Extent, and 1.00 – 1.80 Very Small Extent.

Table 3 presents the extent of inclusiveness and cultural appropriateness of the university–community partnerships as perceived by respondents. The overall weighted mean of 4.38 indicates a Very Great Extent, suggesting that the programs and activities conducted by the university are highly considerate of the community's culture, values, and diversity. The indicator “University programs are respectful of our community's culture and values” obtained the highest mean of 4.46 (Very Great Extent), highlighting that the programs offered are anchored on respect for the cultural identity and heritage of the partner communities. This finding aligns with the assertion of Bringle and Hatcher (2002) that community engagement should integrate cultural respect to foster sustainable partnerships. The statement “The activities are appropriate for all ages and social groups” ranked second with a mean of 4.42 (Very Great Extent). This suggests that the university designs activities that are inclusive, regardless of age or social background, consistent with the inclusive education principles discussed by Booth and Ainscow (2011).

Similarly, “Programs are offered in local language(s) or dialects when necessary” received a mean of 4.40 (Very Great Extent). This reflects the recognition of linguistic diversity as an essential component of inclusivity, resonating with UNESCO's (2017) position that using local languages in community programs promotes broader participation and understanding. Indicators related to marginalized group participation (4.35), cultural sensitivity of representatives (4.33), and alignment with traditions (4.30) also garnered ratings within the Very Great Extent range. This implies that the university's initiatives not only reach the general population but also consider the needs of vulnerable groups, in line with the advocacy of Bawa (2020) on equitable access in community partnerships. The data indicates that the university exhibits a strong commitment to inclusiveness and cultural appropriateness in its community engagement programs. These results emphasize the role of higher education institutions in fostering social cohesion, respecting diversity, and promoting equitable opportunities for all community members.

### *3.4 Perceived Benefits and Limitations of University Engagement Initiatives from the perspective of Local Residents*

University engagement initiatives serve as vital platforms for fostering collaboration between academic institutions and the communities they serve. These partnerships often aim to address local needs, promote social development, and create opportunities for mutual learning and growth. From the perspective of local residents, such initiatives can bring numerous benefits, including access to educational resources, livelihood opportunities, cultural enrichment, and community empowerment. However, alongside these advantages, residents may also perceive certain limitations such as misaligned priorities, lack of sustained commitment, cultural insensitivity, and

limited accessibility for marginalized groups. Understanding both the perceived benefits and challenges provides valuable insights for designing more inclusive, culturally appropriate, and sustainable university-community engagement programs that truly respond to local contexts and aspirations.

**Benefits.** Table 4a shows the perceived benefits of University Engagement Initiatives.

**Table 4a**  
*Benefits of University Engagement Initiatives*

Themes	Codes	Significant Responses
Capacity Building and Skills Development	Skills training, seminars, livelihood programs	The training programs improved our technical skills and gave us opportunities for livelihood.
Access to Resources and Expertise	Technical assistance, research support, expert consultation	We gained access to experts who helped us address community problems through research and advice.
Cultural Preservation and Promotion	Respect for traditions, promotion of local heritage	University activities helped promote our local culture and traditions.
Social Inclusion	Involvement of marginalized groups, inclusive events	Even elderly and low-income families were invited to participate in activities.
Education and Awareness	Literacy programs, health education, environmental awareness	They conduct information drives that increased awareness on health and environment.

The table shows that the respondents overwhelmingly reported that university engagement delivers important, multi-dimensional benefits to local communities. First, the data show strong gains in capacity building and skills development: participants described training programs, seminars, and livelihood courses that improved technical skills and expanded economic opportunities. This finding is consistent with recent studies that document how community-engaged extension and training programs increase local skills, workforce readiness, and practical problem-solving capacity when universities intentionally link pedagogy to community needs (Payán et al., 2021; Sheikhattari et al., 2022). Second, community members emphasized improved access to resources and expertise—for example, technical assistance, research support, and expert consultations that solved local problems. Such outcomes echo the literature on community-engaged research and extension, which shows that university resources (technical know-how, laboratory access, and evidence-based advice) strengthen the quality and uptake of local interventions (Dillard, 2022; Payán et al., 2021).

Third, respondents credited universities with cultural preservation and promotion: initiatives that document, celebrate, or reinvigorate local heritage. Recent case studies and reviews find that place-based engagement that respects local traditions and involves community members as co-creators supports cultural continuity and enhances project legitimacy (Rong, 2023; Sheikhattari et al., 2022). Fourth, social inclusion emerged as a salient benefit—participants reported outreach that included elderly, low-income families, and other marginalized groups. Contemporary practice-based research argues that deliberately inclusive design (partnering with local leaders, providing multiple access points, and removing structural barriers) is essential to ensure equity in community engagement outcomes (Payán et al., 2021; Sugawara, 2023). Finally, education and awareness-raising activities (health, environment, literacy) were frequently cited as immediate, measurable impacts of university work. Systematic reviews of community-engaged public health and extension activities show that university-led information campaigns and participatory education consistently raise knowledge and can shift behaviors when paired with local follow-up and support (Dillard, 2022; Payán et al., 2021).

Taken together, the qualitative themes indicate both immediate (knowledge, skills, services) and longer-term benefits (capacity, cultural preservation, inclusion) from university engagement. The contemporary literature (2020–2024) supports these patterns and underscores a key implication: benefits are maximized when universities adopt long-term, co-designed partnerships that combine technical assistance with culturally appropriate, participatory approaches.

**Limitations.** Table 4b shows the limitations of University Engagement Initiatives.

**Table 4b**  
*Limitations of University Engagement Initiatives*

Themes	Codes	Significant Responses
Limited Program Continuity	Short-term projects, no follow-up	Some programs stop after a few months without follow-up activities.
Inadequate Cultural Sensitivity	Language barriers, lack of understanding of local customs	Some activities were not in our local dialect, making it harder for elders to participate.
Unequal Access	Favoring certain groups, limited invitations	Not all community members are informed about the programs.
Resource Constraints	Insufficient funds, materials, manpower	Projects are helpful but sometimes lack resources to be fully implemented.
Scheduling Conflicts	Activities held at inconvenient times	Some events are scheduled during working hours so fewer people can attend.

The data reveal several recurring limitations perceived by local residents regarding university-led community engagement efforts.

**Limited Program Continuity.** Residents highlighted that many initiatives are short-term and lack sustained follow-up. For example, livelihood projects or training sessions may only run for a few months without continuity, which limits long-term impact. This aligns with findings from Bringle & Hatcher (2002), who argue that sustainable university-community partnerships require ongoing commitment and iterative planning, rather than one-off interventions. Similarly, Cruz & Giles (2000) note that discontinuity undermines community trust and decreases the likelihood of achieving systemic change.

**Inadequate Cultural Sensitivity.** Some community members expressed that certain programs did not consider local languages and customs, making them less accessible to older generations. According to Banks et al. (2007), culturally relevant engagement is crucial for inclusivity, as language barriers and disregard for local traditions can alienate participants and reduce the perceived value of initiatives. Mitchell et al. (2012) emphasize that community engagement should integrate local cultural knowledge into program design to ensure relevance.

**Unequal Access.** Respondents noted that not all residents are informed or invited to participate, resulting in perceived favoritism toward certain groups. This resonates with the work of Sandy & Holland (2006), who stress the importance of equitable communication channels in university-community partnerships to prevent exclusion and strengthen social cohesion.

**Resource Constraints.** Residents mentioned that while programs are beneficial, they often lack adequate funding, materials, or manpower for full implementation. Ward & Wolf-Wendel (2000) similarly identify limited institutional resources as a significant barrier to effective engagement, noting that partnerships often depend on external funding, which can be unpredictable and inconsistent.

**Scheduling Conflicts.** Some events were conducted during working hours, reducing participation among employed residents. This concern is consistent with Clayton et al. (2010), who emphasize that scheduling flexibility is key to maximizing community involvement, especially in working-class or rural contexts where economic activities dictate time availability.

### 3.5 Proposed Recommendations for Improving Future University Social Engagement Programs in their Area

These are recommendations for improving future university social engagement programs in their area. The recommendations outlined in the matrix address the primary limitations identified in current university social engagement initiatives. Establishing long-term engagement plans ensures program sustainability and continuous community benefit, as short-term efforts often fail to create lasting impact. Incorporating cultural orientation and using the local dialect fosters inclusivity, particularly for elders and marginalized groups who may feel alienated

by language barriers.

### Proposed Recommendations for Improving Future University Social Engagement Programs

Identified Limitation	Recommendation	Rationale
<b>Limited Program Continuity</b>	Establish long-term engagement plans with periodic follow-up activities and community monitoring teams.	Ensures sustainability of impact and builds stronger community-university relationships over time.
<b>Inadequate Cultural Sensitivity</b>	Conduct pre-program cultural orientation for university participants; use local dialects in all communications.	Increases inclusivity and ensures that activities respect and align with community traditions and language.
<b>Unequal Access</b>	Create transparent invitation and announcement systems (social media, posters, barangay coordination).	Promotes fairness and allows all interested community members to participate regardless of affiliation or status.
<b>Resource Constraints</b>	Partner with LGUs, NGOs, and private sponsors to pool funding, manpower, and materials.	Expands resource base to improve the quality, reach, and effectiveness of programs.
<b>Scheduling Conflicts</b>	Schedule activities in consultation with community leaders to avoid work hours and cultural events.	Maximizes attendance and ensures programs are aligned with the daily routines and priorities of community members.

Transparent information dissemination guarantees equal opportunities for participation, mitigating perceptions of favoritism. Strengthening resource mobilization through partnerships with local government units (LGUs), non-government organizations (NGOs), and private stakeholders ensures that activities are adequately funded and equipped. Finally, aligning program schedules with the community's availability enhances participation rates, ensuring that initiatives are relevant, accessible, and valued by the people they aim to serve.

## 4. Summary, conclusions and recommendations

### 4.1 Summary

This study employed a quantitative-descriptive research design to assess community members' perceptions of university social engagement initiatives in Shandong Province, China. The descriptive approach was used to systematically present the characteristics, opinions, and attitudes of local residents exposed to university-led programs, while the quantitative method utilized a structured Likert-scale questionnaire to measure dimensions such as awareness, relevance, effectiveness, inclusiveness, and satisfaction. Statistical analysis identified prevailing trends, agreement levels, and rankings of key indicators. Supplementary open-ended questions provided qualitative insights to enrich interpretation. The research was conducted in purposively selected urban and rural communities across Shandong—particularly in municipalities such as Jinan, Qingdao, Tai'an, Zibo, Yantai, and Linyi—chosen for their proximity to universities actively engaged in community outreach. These institutions included Shandong University, Shandong Agricultural University, Ocean University of China, and others involved in education, cultural preservation, environmental awareness, agricultural training, and rural development.

The target sample was approximately 300 respondents out of a population of 6,000, ensuring adequate representation for statistical analysis. Data collection used both printed and online questionnaires, with local facilitators assisting in remote areas. The instrument, validated by academic experts, was divided into four sections: (1) perceptions of relevance and effectiveness, (2) extent of involvement, (3) inclusiveness and cultural appropriateness, and (4) benefits and limitations. Data were analyzed using the average weighted mean to determine levels of agreement and extent for each variable. Ethical protocols aligned with Lyceum-Northwestern University standards were observed, ensuring voluntary participation, informed consent, and confidentiality. Respondents were informed of the study's purpose, procedures, and their rights, with the option to withdraw at any stage without repercussions. The salient findings include:

- Community members generally perceived the university's social engagement initiatives in Shandong as relevant to their needs and effective in delivering educational, livelihood, and environmental benefits, though effectiveness varied by program type.
- Residents reported moderate participation in university-led outreach and development programs, with higher engagement in education and training activities but lower participation in projects requiring long-term commitment.
- University-community partnerships were viewed as respectful of local culture and customs, but inclusiveness remained limited for marginalized groups such as the elderly and residents in remote areas.
- Key benefits included enhanced knowledge, skills, and community pride, while limitations involved short-term program sustainability, insufficient resources, and inadequate communication channels.
- Community members suggested expanding outreach to underserved groups, strengthening communication and publicity, ensuring program continuity, and increasing resources to sustain initiatives.

**Conclusions** - The findings of the study highlight several important conclusions about effective university–community engagement. Aligning engagement initiatives with community needs and priorities enhances perceived relevance and strengthens community trust in the university's role. Increasing awareness and accessibility of programs helps broaden participation and maximize the reach of university-led initiatives. Incorporating local languages, traditions, and cultural values into program design improves engagement and inclusivity across diverse community groups. The results further indicate that addressing resource constraints, scheduling issues, and program continuity can strengthen the sustainability and overall impact of engagement projects. Finally, adopting community-driven recommendations enhances program design, fosters long-term collaboration, and helps ensure that initiatives remain responsive to evolving local needs.

**Recommendations** - Based on these conclusions, several recommendations are proposed. Regular needs assessments should be conducted to keep initiatives aligned with current community priorities, and program outcomes should be showcased through community forums to enhance transparency and trust. Promotion of programs needs to be increased through local media, social networks, and community leaders, while offering flexible schedules and accessible venues can encourage broader participation. Program activities are advised to integrate local cultural practices, languages, and traditions, and to actively engage cultural representatives and community elders in planning and implementation. In addition, resource allocation should be strengthened to support program continuity and potential expansion, and collaborative planning mechanisms involving both university representatives and local stakeholders should be developed. A follow-up study is also recommended to further assess the long-term effects and inform future improvements in university–community engagement efforts.

**Practical educational implications** - the findings have several concrete implications for teaching, curriculum, and school–university partnerships. Community perceptions show that university programs are most valued when they are clearly relevant to local issues such as education, livelihood, health, and environment, and when communities see visible, lasting improvements and capacity-building outcomes. This suggests that universities and schools should design outreach, service-learning, and practicum activities around clearly identified community needs and explicitly link course outcomes to those needs. The very high awareness and participation in university programs, alongside strong ratings for cultural respect and use of local languages, indicate that educational initiatives are more effective when they are accessible, well-communicated, and culturally grounded. For teacher education and school-based projects, this points to the value of training future teachers to use local languages, respect community values, and work with elders and marginalized groups as co-educators in community learning activities.

At the same time, limitations such as short-term projects, resource constraints, unequal access, and scheduling conflicts show that even well-designed educational outreach can lose impact without continuity, inclusive invitations, and practical arrangements that fit families' work patterns. For schools, colleges of education, and partner universities, this implies the need to embed community work in multiyear courses or programs (not only one-off events), to institutionalize follow-up mechanisms, and to teach students how to co-plan time, venue, and communication channels with community leaders.

**Implications for practitioners/teachers** - For teachers and teacher educators, the findings underline the importance of “community-responsive pedagogy.” Community members reported strong benefits in skills training, literacy programs, and awareness-raising activities, especially when these were tied to livelihood and everyday problems. This means teachers can position their lessons, action research, and practicum not only as school tasks but as part of broader community capacity building—designing projects where students co-facilitate seminars, tutorials, or campaigns that respond to local needs identified through simple needs assessments. Teachers also gain a clearer role as cultural mediators. High ratings for cultural appropriateness, combined with reported gaps for elders and remote residents when language or customs are not sufficiently considered, show that teachers who intentionally integrate local culture, language, and traditions can increase participation and trust across generations. Professional development can therefore focus on community mapping, culturally responsive teaching, and partnership-building skills so that teachers become consistent bridges between university initiatives, schools, and families.

**Implications for students** - to pre-service teachers and those in service-learning or extension courses—the study demonstrates that their participation in community programs has real, recognized value for local people in terms of knowledge, skills, and social inclusion. When students are involved in community trainings, literacy programs, environmental campaigns, or documentation of local culture, community members report tangible capacity gains and increased pride in their community. At the same time, the observed limitations (e.g., short duration, limited follow-up, uneven invitations) signal that students need mentoring on ethical, sustained engagement rather than one-shot “requirement-driven” activities. Embedding reflection tasks, feedback sessions with residents, and co-evaluation activities can help students see engagement not as charity, but as reciprocal learning where they are accountable to community partners over time.

**Implications for schools** - For basic education schools, the findings highlight the potential of partnering with universities as part of school improvement and community-school initiatives. Communities perceive university programs as relevant, empowering, and respectful, especially where they support education, culture, and livelihood. Schools that host or co-organize such programs can leverage these partnerships to enrich their curriculum, offer parent and community education, and strengthen the school's role as a local learning hub. However, the issues of unequal access, resource limitations, and inconvenient scheduling show that schools must actively negotiate program design rather than simply receiving pre-packaged activities. By co-planning with universities and local government, schools can advocate for inclusive invitations (reaching marginalized families), adequate resource support, and schedules aligned with parents' work and cultural calendars, which in turn deepens community trust in the school as a responsive institution.

**AI use declaration** – The author used Perplexity solely for language and grammar checking. All data analyses were done by the author. The author takes full responsibility of the final version of this manuscript.

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