



# EXTENSION

College of Agriculture,  
Biotechnology & Natural Resources

## Needs Assessments Processes, Methods and Examples

### ANNOTATED BIBLIOGRAPHY

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## Introduction

One of the first priorities for a new extension educator or agent is to conduct a needs assessment to inform their programming (Caravella, 2006). Angima, Etuk, and King (2014) state that a solid needs assessment is the foundation of a successful Extension program. Needs assessment is an essential step in the program planning, development, and evaluation cycle (Etling & Thomas, 1995). Needs assessment also has been identified as one of the key educational competencies for extension educators (Ghimire, 2010; Koundinya, 2010). Many state extension systems require extension faculty to conduct a systematic and thorough needs assessment, and document the results in their reviews. In this context, it is important to have an annotated bibliography focused on needs assessment processes and methods with relevant examples for extension professionals. This annotated bibliography is Extension-centric with examples from other state Extension systems and community-based needs assessments related to Extension programming. The first section has studies related to processes, methods, and types of needs assessments. The second section contains examples of needs assessments of various types, scope, and focus. This bibliography is part of a larger set of educational and training resources on Needs Assessment, Program Development, Program Evaluation, and Impact Writing and Story Telling developed by the Western Regional Evaluation Network (WREN).

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## Section 1

### Needs Assessment Processes and Methods

**Bridges, C. (2008). Identifying Agriculture and Forestry Educational Needs Using Spatial Analysis Techniques, 46 (3), 3TOT6. Retrieved from:**  
<https://www.joe.org/joe/2008june/tt6.php>

The author presents in this paper arguments for the use of spatial analysis techniques to identify agriculture and forestry educational needs. The author argues that needs assessments are usually important to provide educational programs towards producers. By combining needs assessments with spatial analysis techniques, educational efforts can focus in areas where programs can optimize agricultural profitability and environmental quality.

**Caravella, J. (2006). A needs assessment method for extension educators. *Journal of Extension*, 44(1), 1TOT2.**

This article presents various needs assessment methods used by a family living extension agent in rural Wisconsin. Methods used included census data, existing local needs surveys, and conducting interviews with key informants ( $n= 25$ ). The key informants included people from county government departments, law enforcement, the court system, not-for-profit agencies, and religious organizations.

**Donaldson, J., Franck, K. (2016). Needs Assessment Guidebook for Extension Professionals. The University of Tennessee Extension Publications. PB 1839. Available at: <https://extension.tennessee.edu/publications/Documents/PB1839.pdf>**

This publication is a guidebook on how to organize needs assessments and include three phases of conducting an effective needs assessment: exploration, assessment and utilization. Different methods for each phase are provided, such as document reviews, individual and group methods (such as key informants, personal interviews, questions for interview, or committees, focus groups, surveys, open listing sessions, brainstorming, concept mapping, among others), interpretation of results and communicating the results of the needs assessment. Each section contains useful tools to design, conduct and interpret effective needs assessments.

**Ekins, J (2018). Extension Involvement in Collaborative Groups: An Alternative for Gathering Stakeholder Input. Journal of Extension, 56 (2). 2IAW5. Available at: <https://joe.org/joe/2018april/iw5.php>**

The author proposed an alternative for community educational needs assessment to focus group research, which consists of participant observation research with collaborative stakeholder groups. The author compares focus group research with collaborative stakeholder group observation in different dimensions, provides different examples of published work with this method, and concludes that the method provides a robust assessment, and in addition, offers great networking opportunities and collaborative sources of information.

**Ennis, G., West, D. (2010). Exploring the Potential of Social Network Analysis in Asset-based Community Development Practice and Research. Australian Social Work, 63:4, 404-417, DOI: 10.1080/0312407X.2010.508167**

This article makes the case for the incorporation of key concepts from social network theory on asset-based community development practice. The authors argue that social network analysis is promising as a new methodology for understanding the efficacy of asset-based community development (ABCD) projects. The authors also argue that currently, although the asset-based community development model is widely used, it is criticized for its lack of an evidence base, theoretical depth and consideration of macro level causes of disempowerment. Social network concepts have been rarely used in a comprehensive manner in asset-based community development practice or research. This paper proposes to address these challenges through: 1. Exploring the strengths and limitations of ABCD, 2. Broadly overviewing social network theory analysis, 3. Considering its potential to be integrated into ABCD practice and research. The paper concludes that social network analysis can provide a framework for researching ABCD interventions, and assist the ABCD practitioner to understand how such interventions impact upon the various relationships between the elements that constitute a community.

**Folinsbee, S., Jurmo, P. (1994). Collaborative Needs Assessment: A Handbook for Workplace Development Planners. ABC Canada. Available at: [https://pauljurmo.info/pauljurmo/Writings \(US & Canada\) files/Collab%20Needs%20Assessment%201994.pdf](https://pauljurmo.info/pauljurmo/Writings_(US_&_Canada)_files/Collab%20Needs%20Assessment%201994.pdf)**

This handbook outlines a four-phase collaborative approach to assessing a work organization's education needs and specifying a range of activities to meet the identified needs. Such phases are: laying the groundwork for a workplace needs assessment (get all interested groups

committed, organize a planning committee, plan and hold initial committee meetings, design the workplace needs assessment); carrying out the needs assessment (prepare to gather information, collect information in personal interviews and focus groups, gather information from other sources, organize the information, analyze selected workplace documents); interpreting and reporting (interpret the information, write the final report, report the findings); and deciding what happens next (develop and get commitment for an action plan and evaluate the workplace needs assessment).

**Garst, B., McCawley, P. (2015). Solving Problems, Ensuring Relevance, and Facilitating Change: The Evolution of Needs Assessment Within Cooperative Extension. Journal of Human Sciences and Extension, 3(2), 26-47. Retrieved from: <https://bit.ly/38gD8Ez>** The authors trace the history and evolution of needs assessments within cooperative extension. They first define the goal of needs assessments as twofold: 1) to learn about stakeholders' problems, issues, and/or concerns, and 2) to understand how we can respond with program, products, and services.

Reasons for conducting needs assessments from Etling and Maloney (1995):

**Table 1. Reasons for Needs Assessment (Adapted from Etling & Maloney, 1995)**

<i>Necessary part of program planning</i>	We need to know where we are going before we plan how to get there.
<i>A principle of democracy</i>	People should be involved in decisions that affect them and should help plan programs where they are expected to be participants.
<i>Motivation</i>	Theories tell us we should appeal to individuals' basic needs and interests.
<i>Accountability</i>	Increasing demands are being placed on Cooperative Extension on all levels by our many publics.
<i>Support</i>	Program support depends on how well we meet documented needs in the community (from members, parents, decision makers, donors, and others).
<i>Anticipation of conflicts</i>	This is done by understanding needs.
<i>Needs change</i>	We can never assume we have the final word on people's needs.
<i>Complex society</i>	As societies become more complete, people tend to depend more on others to meet their needs.

The authors also describe the historic evolution of needs assessments, where they also highlight how needs assessments have been used over the decades in extension. Before the 1960s, needs assessments were conducted to identify and prioritize programs for clientele. Local groups were valuable to help plan how objectives were to be met, rather than to help identify and prioritize those objectives. Between the 60s and 70s, Extension services adopted more sophisticated protocols to gather information about clientele needs. The main purpose of needs assessment was then to evaluate if the program was meeting the needs of those it was intended to serve. During the 80s, there was a significant growth in the use of needs assessment practices, but given budget cuts, more cost-effective methods (?) that involved larger groups started to emerge. Needs assessments in extension were focused on identifying the most important problems in: home and family life, work and business, and communities. During the 90s, a more integrated approach

was adopted for needs assessments, where the expertise of the Extension professional was also incorporated through analysis of secondary data or conversations with key informants. Needs assessments were used for *Mega* planning at society level, *Macro* at the organizational level and *Micro* at the individual or small group level. Needs assessments were used to tackle complex community development issues. Asset mapping was also introduced in this decade, which helped with capacity assessment. Finally, during the 2000s to the present, new technologies were introduced for needs assessments, such as new information technology platforms, GIS, real time data collection, visual display, data storage in an interactive setting. Participatory research approaches to needs assessments were disseminated to enhance community buy-in, reinforce community development, authenticate data interpretation, participate as co-learners. Photo-voice techniques also emerged. As Catalani and Minkler (2010) summarize, outcomes of photo-voice approaches include: enhance community engagement action and advocacy, improved understanding of community needs and assets for community health benefits, and increased individual empowerment.

**Guion, L. (2010). A 10-Step Process for Environmental Scanning. Journal of Extension, 48 (4), v48-4iw2. Available at: <https://joe.org/joe/2010august/iw2.php>**

This article describes a new 10 steps process for conducting environmental scanning in North Carolina Cooperative Extension (NCCE). It provides comprehensive information on the current conditions in the country and/or state that may represent potential opportunities. The 10 steps are: 1. County team conduct situational analysis using secondary data, 2. List issues that are important based on secondary data, 3. Conduct situational analysis using primary data from major stakeholder groups, 4. Map county to obtain primary data from a cross section of the population, 5. Collect primary data in each of the mapped areas, 6. List issues that consistently surfaced as important in step 2, 3 and 7. Conduct external asset assessments, 8. Prioritize issues, 9. Examine the complexity and interdisciplinary nature of priority issues, 10. Each county enter priority issues, internal and external assets, and the integrated programming strategies to address the issues into the web-based NCCE county priority issues database. The article describes each of these 10 steps and provides a practical guide for conducting environmental guides at the county level.

**Havercamp, M., Christiansen, E., Mitchell, D. (2003). Assessing Extension Internal Organizational Needs Through an Action Research and Learning Process. Journal of Extension, 41 (5). 5FEA2. Available at: <https://www.joe.org/joe/2003october/a2.php>**

A needs assessment for a statewide Extension organization in the western US land-grant institution was carried out using participatory action research and learning process. The process included focus groups, questionnaire, employee feedback sessions to identify the needs over a 5-year period. The University of Nevada Cooperative Extension (UNCE) statewide government board used the results of this study for strategic planning. The authors found through this process the importance of engaging Extension leadership, faculty and staff in the design and implementation of the study.

**Hillier, A. (2007). Why Social Work Needs Mapping. Journal of Science Work Education, 43 (2), 205-222. Doi: 10.5175/JSWE.2007.200500524**

The author argues in this paper several reasons why social work would benefit from the use of GIS. Among such reasons, the author argues that GIS is critical to identify the community needs

and assets, particularly how and why the environment impacts individuals and, importantly, provide powerful evidence of disparity. The author provides examples of social work using GIS that has shown high levels of spatial inequality among recipients who tended to live in areas with poor service, providing evidence of a spatial mismatch. Mapping allows information about individuals and households to be integrated with information about their communities, so that funders, service providers and researchers can understand individuals in the context of their communities. Documenting not only the needs, but importantly where there is need is critical for intervention strategies. The author argues that such integration will improve delivery of social services and empower communities and traditionally disenfranchised groups.

**Kaplan, M., Shih-Tsen, L., Radhakrishna, R. (2003) Intergenerational Programming in Extension: Needs Assessment as Planning Tool. Journal of Extension, 41(4). Feature Articles. 4FEA5. Available at: <https://www.joe.org/joe/2003august/a5.php>**

Kaplan et al (2003) present the findings of their needs assessment study conducted to plan and develop a statewide intergenerational program. The authors conducted a mail survey, directed to Extension personnel, primarily Extension educators, in Pennsylvania. Respondents noted their preferences on program content and delivery format. The results were used to make key decisions about curricular directions and program delivery strategies. The authors highlight the particular relevance of a needs assessment on this field given the lack of consensus regarding program content and delivery methods. The results represent a first step towards developing a broad-based statewide intergenerational program.

**Kerka, S. (2003). Community Asset Mapping. Educational Resources Information Center (ERIC). Trends and Issues Alert. N 47. Retrieved from: <https://www.calpro-online.org/eric/docs/tia00115.pdf>**

The author describes first asset mapping as a method for documenting the tangible and intangible resources of a community, where assets may be persons, physical structures, natural resources, institutions, businesses, or informal organizations (Berkowitz and Wadud, 2003, as quoted by the author). The asset mapping approach draws on appreciative inquiry, recognition of social capital, participatory approaches to development, collaborative economic development models, and efforts to strengthen civil society (Mathie and Cunningham, 2002, as quoted by the author). In this note, the author lists and describes resources that can help community educators use asset mapping approaches for program planning.

**Kramer, S., Amos, T., Lazarus, S., Seedat, M. (2012). The Philosophical Assumptions, Utility and Challenges of Asset Mapping Approaches to Community Engagement. Journal of Psychology in Africa, 22:4, 537-544. DOI: 10.1080/14330237.2012.10820565**

This article presents a literature review and discussion of different asset-based mapping approaches, such as: Asset-Based Community Development (ABCD); Participatory Inquiry into Religious Health Assets, Networks and Agency (PIRHANA); Community Health Assets Mapping for Partnerships (CHAMP); the Sustainable Livelihoods Approach (SLA); Planning for Real®; and approaches using Geographic Information Systems (GIS). The review describes and examines these approaches to show ways in which asset-focused approaches as interventions could be used to promote community development through engagement. The authors conclude that asset mapping approaches derive their value from their capacities to support partnership building, consensus creation, and community agency and control.

**Lightfoot, E., Simmelink, J., & Lum, T. (2014). Asset Mapping as a Research Tool for Community-Based Participatory Research in Social Work. National Association of Social Workers. Doi: 10.1093/swr/svu001**

This research note describes the asset mapping approach as a community-based participatory research (CBPR) method for social work. The article describes its origins, provides an overview of asset mapping, presents it as a research technique and as a method of asset mapping in CBPR and in social work research. The authors conclude that asset mapping is well suited for social work practice and as a research method for use in social work CBPR research partnerships that explore social issues. It can help tease out the strengths of communities, fits well with social work's strengths-based approach to conducting research in low-resource communities, it is a fairly straightforward approach and the evidence base for Asset-based Community Development (ABCD) projects is robust.

**Lien, A., Ruyle, G., & López-Hoffman L. (2018). Q Methodology: A Method for Understanding Complex Viewpoints in Communities Served by Extension. Journal of Extension, 56 (2). V56-2iw4. Available at: <https://joe.org/joe/2018april/iw4.php>**

This article introduces Q methodology. This is an idea-sorting activity that can help Extension improve outreach and education on new issues. The method uses a card-sorting exercise for researchers to analyze individuals' subjective viewpoints on different issues and groupings of different viewpoints within a community. The difference of Q methodology to focus groups, surveys or interviews, the authors claim, is that Q methodology focuses on the participant, not the participant's answers. It provides an understanding of how respondents think about the questions themselves, rather than how respondents answer to questions that probe different aspects of an issue. The article explains the methodology and provides a didactic example of how the method works, as well as recommendations for further readings.

**North Carolina Cooperative Extension. 2017-2018 Needs Assessment Community Statewide Summary. Retrieved from: <https://evaluation.ces.ncsu.edu/wp-content/uploads/2019/03/NA-Community-Statewide-Report.pdf?fwd=no>**

North Carolina Cooperative Extension provides several resources for County Needs Assessments, such as: how to summarize county data, statewide report examples and methods for data collection, such as: secondary data, different instructions to conduct interviews, county commission surveys, stakeholder focus groups, employee surveys, and citizen surveys. On the examples they provide they use multi-methods approaches to collect county data and stakeholder inputs. They also provide on their reports detailed examples for the data analysis and how to visualize most important community issues for relevant questions.

**Phibbs, E., Relf, D., Hunnings, J. (2005). Implementing a Needs Assessment for Long-Term Strategic Planning in 4-H Horticulture Programming. Journal of Extension. Volume 43. Number 4. Research in Brief. 4RIB7. Available at: <https://www.joe.org/joe/2005august/rb7.php>**

The authors implemented a statewide needs assessment for a long-term strategic planning in 4-H horticulture programming. The authors surveyed 4-H agents, Agriculture and Natural Resource agents, and Master Gardener Coordinators regarding horticulture programs, areas for new

programming, and available resources and resource needs. Results identified areas of growth and needs for improved communication and resource sharing. The authors highlight that this needs assessment case serves as an example of a type of strategic planning tool that might be useful for extension programs.

**Singletary, L., Powell, P. (2003). Conducting a Formal Needs Assessment: A Five-Step Survey Approach. University of Nevada Reno. Retrieved from:**  
<https://extension.unr.edu/publications.aspx>

This document presents a 5-step approach to conduct a formal needs assessment through mail surveys. The 5 steps are: 1. Develop a broad set of questions and determine protocol, 2. Complete training (IRB) and seek certification to conduct research, 3. Seek IRB approval to conduct survey, 4. Implement needs assessment, record responses and analyze the data (Excel and SPSS and two software programs recommended for the analysis), 5. Publish an extension fact sheet, special publication or bulletin to share the results of your needs assessment.

**Smith, C., Freeman, R. (2002). Using Continuous System Level Assessment to Build School Capacity. American Journal of Evaluation, 23 (3), 307-319. Retrieved from:**  
<https://journals.sagepub.com/doi/10.1177/109821400202300306>

In this paper, the authors introduce a conceptual framework for internal assessment: the continuous system level assessment (CSLA). This method has three phases: needs assessment and problem identification, designing interventions and building staff capacity, and implementing and evaluating interventions. The method is intended to foster local expertise by utilizing assessment information to design effective professional development strategies.

**Wang, C., Burris, M. A. (1997). Photovoice: Concept, Methodology, and Use for Participatory Needs Assessment. Health Education and Behavior, 24 (3), 369-387. Retrieved from:**  
[https://deepblue.lib.umich.edu/bitstream/handle/2027.42/67790/10.1177\\_109019819702400309.pdf?sequence=2&isAllowed=y](https://deepblue.lib.umich.edu/bitstream/handle/2027.42/67790/10.1177_109019819702400309.pdf?sequence=2&isAllowed=y)

The authors discuss the uses and implications of photovoice methods for needs assessments, based on their experience in Yunnan. First, photo-voice techniques fuel critical consciousness and collective action. Second, photo voice provides a community-based diagnostic tool to readdress inadequate theories in which programs are based. Third, they provide powerful means to advocate increased funding and guide the distribution of money. Fourth, photovoice may enable grassroots constituents.

**Wille, C; Garcia, Z; Garcia-Pabón, J. (2019). Collaborating Across State Lines to Leverage Cultural Competency Expertise. Volume 57. Number 3. Tools of the Trade. 3TOT6. Available at:** [https://www.joe.org/joe/2019june/pdf/JOE\\_v57\\_3tt6.pdf](https://www.joe.org/joe/2019june/pdf/JOE_v57_3tt6.pdf)

The authors identified the need for a statewide Latino cultural competency training for UTAH State University (USU) Extension Personnel, whose solution involved first a collaborative effort on adaptation and customization of a needs assessment tool. After the process, the authors found that collaborating across the state professionals produced many benefits, such as: streamline resources and use of already developed material, capitalization of peer experience, customization

of other state's tools and resources, mutual beneficial collaborations. Also found that administrative collaboration is key to successful cross-state collaboration work.

**Worker, S., Schmitt-McQuitty, L., Ambrose, A., Brian, K., Schoenfelder, E., Smith, M. (2017). Multiple Methods Needs Assessment of California 4-H Science Education Programming. Journal of Extension. Volume 55. Number 2. Research in Brief. 2RIB4. Available at: <https://www.joe.org/joe/2017april/rb4.php>**

This brief details a statewide assessment to evaluate the needs of county-based 4H programs related to the key areas of the 4-H Science Initiative: Results identified areas for growth and needs for improved communication and resource sharing. Multiple qualitative data sources were used (online open-ended survey, focus group interviews, participatory working groups, data analysis and data integration). The needs assessment revealed opportunities for more intentional and systematic 4-H science programming. Also the need for national and state efforts that provide practical program models and examples of programs targeting scientific literacy, professional development for staff, and consistency in messaging and branding. The authors highlight that using more than one method to analyze and interpret data improved their understanding of the needs and gaps of the 4-H science programming.

## Section 2

### Examples of Needs Assessments and Their Use

**Duncan, S., & Marotz-Baden, R. (1999). Using Focus Groups to Identify Rural Participant Needs in Balancing Work and Family Education. Journal of Extension, 1RIB1, 37 (1). Retrieved from: <https://www.joe.org/joe/1999february/rb1.php>**

The authors illustrate through their project on balancing work and family needs how they used focus groups and evaluation to understand the target audience for program development. They illustrate how marketing techniques were used by Extension to develop a program, prices, promotions and where to hold it to attract the largest number of participants and meet the needs of the target population.

**Duttweiler, M. (2008). The value of evaluation in cooperative extension. In: Braveman, M. T., Engle, M. Arnold, M. E., & Rannekamp, R. A. (Eds). Program Evaluation in a complex organizational system: Lessons from Cooperative Extension. New Directions for Evaluation, 120, 87-100. DOI: <https://doi.org/10.1002/ev.278>**

The author examines how evaluation practices have been of value in cooperative extension. More than 675 evaluations were examined consistently and yielded program counsel applicable to Extension education practice. Nearly seven in ten studies addressed program improvement. The author finds a clear evidence of substantive program modification in response to program evaluation. Some examples of how evaluation studies influenced Extension practices include: helping establish program direction, improving existing educational practice, informing public policy, establishing or sustaining program support, establishing a basis for resource allocation decisions, influencing relationships with stakeholders, and strengthening evaluation practice itself.

**Fuller, J., Bentley, M., Shotton, D. (2001). Use of Community Health Needs Assessment for Regional Planning in Country South Australia. The Australian Journal of Rural Health, 9, 12-17. Available at: <https://www.ncbi.nlm.nih.gov/pubmed/11703261>**

This paper documents how community health needs assessments were used for regional and country health service planning in South Australia between 1995 and 1999. Both local and regional needs assessments were elaborated. The authors find that local need assessments involve local commitment to service change, but are usually slow processes. Data from needs assessments were translated into health promotion and early intervention program priorities through strategic planning. *But given that traditional clinical services comprise the major proportion of a health service's budget, the planners concluded that needs assessment in isolation from other strategies has only had a small impact on moving the allocation of health service resources towards population need.* (\* Italics are taken verbatim from the paper)

**Hilton, J., Martin, S., & Evans, W. (2007). Meeting the Needs of Nevada's Older Adults: The Role of University of Nevada Cooperative Extension. University of Nevada Cooperative Extension. Educational Bulletin EB-07-02. Retrieved from: <https://www.unce.unr.edu/publications/files/cy/2007/eb0702.pdf>**

Nevada's rapid increase of its senior population is associated with different social processes such as: increased longevity, higher education of baby boomer generation who tend to delay retirement, higher standards of living, geographic mobility (Nevada receives migration of retirees into the state), greater diversity in family structures and ethnic composition of the population. These changes demand planning for later years that will focus on three main outcomes: maintaining and enhancing mental and physical health, keep people engaged in life and live independently, help people make successful transitions and decisions about important life issues. A team of University of Nevada Cooperative Extension specialists used several strategies to assess the need for programs for older adults. The team: reviewed data, theories, surveyed participants of conferences on aging, assessed services currently provided, held community forums. These strategies were followed to: 1. Assess the present and future needs of older adults, 2. Investigate the resources available to meet these needs, 3. Evaluate the gaps between identified needs and resources. This report provides detailed findings of this needs assessment and recommends specific activities related to: i. outreach education, ii. research, and iii. capacity building.

**Kim, Y. (2012). Parenting Needs for Parents of Young Children in Southern Nevada. University of Nevada Cooperative Extension. Special Publication 12-10. Retrieved from: <https://www.unce.unr.edu/publications/files/cy/2012/sp1210.pdf>**

Children's early years have a significant effect on their development. In order to provide new parenting programs or maintain existing ones, it was necessary to identify parenting education needs. The multi-method assessment included: i. a review of most critical areas in young children development, ii. Examination of wellbeing statistics, iii. Interviews with personnel working with young children and their families, iv. Information collected from parents of young children. The study hence recommends after the needs assessment: i. University of Nevada Cooperative Extension should focus first on six parenting priorities of young children, ii. Parenting information should be delivered through the preferred method identified by parents of

young children, iii. More parenting education workshops should be offered, iv. It is necessary to collaborate with other agencies or educators in rural areas and geographical diverse areas.

**Kratsch, H., Skelly, J. (2012). Situational Analysis: Horticultural Needs and Trends in Nevada. University of Nevada Cooperative Extension. Special Publication 12-12. Retrieved from: <https://www.unce.unr.edu/publications/files/ho/2012/sp1212.pdf>**

This report presents the results of comprehensive needs assessments, studies, stakeholder interviews and surveys that have been compiled to identify potential horticulture education targets and program efforts in Nevada. The report investigates on Nevada demographics, climate, horticultural trends, trends in consumer horticulture, trends within the horticulture industry, Nevada green industry, horticultural needs at the county level. Upon review on these topics, the report proposes a statewide emphasis on these horticultural issues: home and small-scale food production, support of community and school garden program efforts, pest diagnosis and management, climate-appropriate gardening, programs to support green industry training.

**Marshall, M., Bush, D., Hayes, K. (2005). Extension Programming for Food Entrepreneurs: An Indiana Needs Assessment. Journal of Extension. Volume 43. Number 5. Research in Brief. 5RIB9. Available at: <https://www.joe.org/joe/2005october/rb9.php>**

This needs assessment was elaborated to identify the needs of food entrepreneurs in the state of Indiana. Extensionists from 86 counties were surveyed on topics of marketing, new business start-up, food regulations, and food safety. The results of the study were used to develop a statewide workshop for food entrepreneurs. This workshop was the result of the collaboration between the Department of Food Science and Agricultura Economics.

**Skelly, J., Singletary, L., Angle, J., Sepúlveda-Pulvirenti, E., Moffitt, M. (2010). Addressing the Needs of Nevada's Growing Latino Population. University of Nevada Cooperative Extension. Special Publication SP-10-08. Retrieved from: <https://www.unce.unr.edu/publications/files/cy/2010/sp1008.pdf>**

This report summarizes first that the Latino population in Nevada began growing in the 1960s, in numbers and diversity. Nevada is now one of the top 10 states in the nation in the percentage of Latino population. Although Latinos are economically active, they are underrepresented in professionals and technical positions. A large proportion of families did not have health insurance. This research is an important first study of the Latino population in Nevada. It is the first comprehensive effort to assess the Latino Extension program and other needs. Researchers for this evaluation participated in reviewing literature, methods, contacting numerous organizations interested in Latino issues, developing a comprehensive list of issues that might interest Latinos. Results indicate that many of the issues participants identified as important to them are outside the purview of Extension, but may serve other organizations. The results of this assessment support the need to develop Extension programs, inclusive of curriculum and trainings, to address identified issues within the Extension mission.

**Smith, M., Meehan, C., & Dasher, H. S. (2009). Assessing Volunteers' Needs and Interests to Inform Curriculum Development in 4-H. Journal of Extension, 47 (1), 11AW3. Retrieved from: <https://www.joe.org/joe/2009february/iw3.php>**

This paper describes the use of focus group interviews and a statewide survey to identify curriculum and programmatic needs in 4-H Animal and Veterinary Science from the perspectives of 4-H volunteers. The survey data revealed areas where volunteers needed the most resources and support. Volunteers indicated a need to have such concepts applied through educational activities. Hence, two curricula were developed informed by such needs. The curricula was designed to be used by volunteers.

**Walker, S. (2003). Building a State Child Care Initiative: Applying Principles of Teamwork and Collaboration. Volume 41. Number 3. Feature Articles. 3FEA2. Available at: <https://www.joe.org/joe/2003june/a2.php>**

Walker (2003) review's the state of Maryland's effort on building a childcare initiative statewide. Maryland Cooperative Extension pulled together individual county and city Extension family and Consumer Sciences educators to provide a coordinated training and to build a statewide system of service. The author, based on their experience, provides a list of recommendations for the effective development of a statewide team effort, which includes: to build on the good things that are present (capacities, skills, and assets of people involved), empower and reward individuals, ensure trusted leadership, be responsive to need, seek resources.

### References

Angima, S., Etuk, L., & King, D. (2014). Using needs assessment as a tool to strengthen funding proposals. *Journal of Extension*, 52(6), TOT v52-6tt1.

Berkowitz, B., & Wadud, E. (2013). Identifying Community Assets and Resources. In: The Community Tool Box, chapter 3, section 8. University of Kansas.  
<https://ctb.ku.edu/en/table-of-contents/assessment/assessing-community-needs-and-resources/identify-community-assets/tools>

Caravella, J. (2006). A needs assessment method for extension educators. *Journal of Extension*, 44(1), 1TOT2.

Etling, A., & Thomas, M. (1995). Needs assessment for extension agents and other nonformal educators. Pennsylvania State Univ., University Park. Cooperative Extension Service. ED 388 774.

Ghimire, N. R. (2010). The relative importance of selected educational process professional competencies to extension educators in the North Central Region of USA. Doctoral Dissertation, Iowa State University, Ames.

Koundinya, V. (2010). An analysis of the food safety educational processes in the Cooperative Extension System of the North Central Region of the United States. Doctoral Dissertation, Iowa State University, Ames.

Mathie, A., & Cunningham, G. (2003). From Clients to Citizens: Asset-Based Community Development as a Strategy for Community-Driven Development. *Development in Practice* 13(5):474-486. DOI: 10.1080/0961452032000125857.

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