



# Resilience in New Mexico Agriculture Laguna Regional Meeting Summary

## Introduction

The **Resilience in New Mexico Agriculture** regional meeting in Laguna was convened on January 14, 2016. A diverse group of 44 people from eight different counties attended the meeting, including farmers, ranchers, commercial producers and marketers, educators, researchers, financial lenders, grantmakers, government professionals, soil and water experts, advocates and media.

The purpose of the meeting was to elicit input from key stakeholders on the trends having the most significant impact on the agriculture industry, as well as challenges and potential solutions, especially in tribal communities. These ideas will contribute to the industry and stakeholder research that will result in a long-term plan for a robust food and agriculture system in New Mexico.

Throughout the meeting, participants worked in table groups to discuss the following trends, challenges and solutions. Once information is gathered from all the regional meetings, it will be synthesized and potentially verified.

## Trends

Participants were asked to identify key trends that are having an impact (either positive or negative) on the agriculture industry, in general. The trends represent individual opinions of participants in attendance at this meeting and not necessarily the group as a whole.

### Positive

- **Technology & Methods**—Many farmers and ranchers are using improved methods that conserve water and enhance soil health. Water conservation improvements include better drip irrigation, water harvesting methods and self-filtration systems for water collection. The survey required by the NM Pueblo Irrigation Infrastructure Act is almost completed and the information will help tribal leaders prioritize infrastructure repairs. New research and technology is available for increasing soil quality including better range management to prevent overgrazing, more awareness of natural methods for soil care and more focus on field preparation to increase the amount of land suitable for agriculture use.
- **Markets**—There is more demand for local foods and better access to local markets that can improve the physical and economic health of tribal communities. SNAP and WIC benefits help more families afford fresh produce from local markets. The National School Lunch Program includes native, cultural foods in schools. Better transportation support programs are also making a difference.
- **Food Sovereignty**—There is more effort to retain cultural values by merging old and new practices for producing food. Communities are returning to producing native and organic crops as well as protecting seed integrity through saving and using traditional seeds. Tribal leadership is supporting local, healthy food access which leads to better support for small- and medium-scale farmers. There is also increased support from national programs like AmeriCorps to establish community gardens. Tribal elders are more involved in building hoop gardens for schools and working with youth. Tribal healthcare professionals and programs like Fresh Rx educate community members about the connection between local food and health.
- **Industry Support**—There is more assistance and community-based cooperation from state and federal organizations for training, funding, and support programs (e.g., livestock management training, support with cattle forage and water distribution needs, procurement requirements). Tribes can receive preference for some government programs.
- **Economics**—Some agriculture products, such as beef, are earning better prices for producers.

- *Youth Interest*—Young people are more interested in staying in or returning to the agriculture as a career. The Intertribal Agriculture Council is seeing larger turnouts for national gatherings. The next generation is returning to native traditions of land stewardship and food production. Grant funding for school gardens and mentorship programs have increased youth participation and excitement for the industry.

### Negative

- *Water*—Catastrophic forest fires and flooding have created long-term challenges for tribal land and water quality. Water pollution from large-scale operations and oil and gas production have also had an impact on water quality. A deteriorating irrigation distribution system, accumulated silt and dam seepage has reduced the efficiency and amount of water delivered for food production. Water rights settlements and lack of adequate water and drought management planning also impact water available of agriculture use.
- *Bureaucracy*—Lack of clarity between the Bureau of Indian Affairs and tribal authority, as well as complicated federal applications and requirements inhibits some producers from making improvements or expanding. Many organizations are working on similar problems, but are not necessarily working together. There is increasing competition for grant funding.
- *Producers & Succession*—As aging producers leave the industry, the next generation is finding it more difficult to stay involved in agriculture. Access to enough land for a viable operation, capital costs for equipment and low returns have lead many young people to leave the industry for other jobs such as mining. Those who have left and want to return need to rebuild their knowledge and skills.
- *Land*—Uncertain grazing rights, overgrazing, chemical fertilizer pollution, and mining and other industry pollution, as well as lack of support for environmental clean-up from the U.S. Environmental Protection Agency decreases available rangeland. Uncertainty over the ownership of unused family fields keeps potential farmers from planting crops. Agriculture land has also been reassigned for residential use.
- *Economics*—Agricultural funding and subsidies have been reduced for tribal communities, especially for small producers. Loans for livestock, machinery and infrastructure are difficult to obtain given that trust land cannot be used as collateral.
- *Markets*—Packaging and marketing local food products is barrier for small-scale farmers. Selling local food to schools is difficult, and few casinos are buying local produce. Many products, especially milk, go bad before they are sold.
- *Workforce*—Fewer workers are available for any size of farming or ranching operation.
- *Import/Export Policies*—Tribes are also competing with international producers, especially from Mexico who can undercut prices for chilies, beef and other meats from U.S. producers.
- *Climate Change*—Extreme weather, increasing drought and stronger winds seem to be on the rise.
- *Seed Integrity*—Tribes are losing their sources of legacy seeds and the knowledge and practices for preserving and growing these seeds. There is increasing production and use of genetically modified seeds.

### Challenges

These trends lead to a number of challenges which were prioritized by the participants. Crosscutting each of these challenges is the need to educate all community members, including all producers.

1. Continued legal access to high-quality water
2. Removal of planning, logistical and financial barriers
3. Attracting and keeping the interest of youth in the agriculture industry
4. Ensuring more land is available and viable for agriculture production
5. Protecting the environment and keeping it clean
6. Facilitating farm-to-market opportunities
7. Ensuring indigenous seed sovereignty
8. Producing healthy food
9. Supporting small-scale production

## Solutions

Given the challenges, participants were asked to recommend potential solutions that would make the most positive difference in the industry.

### Water

1. Build both the elected and non-elected leadership needed to ensure effective water policy.
2. Protect priority water rights and address inequities in legal issues.
3. Renegotiate the inter-state water compacts, especially regarding the impact of evaporation on water delivery, or petition the supreme court to overrule the compacts.
4. Use the water from under-utilization reserves (e.g., San Jose Lake, Acoma Lake).
5. Repair and maintain aging water infrastructure (i.e., dams, ditches).
6. Improve water quality monitoring making it easier for tribes to apply for permits and grants.

### Planning, Financial & Logistical Barriers

7. Ensure the statewide strategic plan is aligned with tribal sovereignty.
8. Improve communication and sharing of ideas among tribes and pueblos.
9. Create a centralized clearing house of information regarding planning, financial and logistical resources.
10. Assign an employee who knows the community and available resources to help members of the agriculture industry match needs to resources.
11. Create a group of experienced farmers and ranchers, not tied to tribal leadership political elections, that can oversee and support programs and resources over the long-term.
12. Include training on how to access planning and financial resources in high school agriculture classes.
13. Fund a program for maintenance and expansion needs.
14. Use tribal resources to ease transportation issues (e.g., buses).

### Producers & Succession

15. Start engaging young children in Head Start and a Farm to Pre-school program in activities that will increase their interest in food and agriculture.
16. Increase school programs that focus on food and agriculture.
17. Establish more 4-H organizations on tribal lands to help youth become more aware of the agriculture industry in general.
18. Use social media to inform youth of the variety of careers in the agriculture industry.
19. Support networking activities for youth (i.e., intertribal agriculture council).
20. Build youth awareness through farm tours.
21. Incorporate farm animals and agriculture activities into other classroom activities (e.g., science, math).
22. Communicate how agriculture is a STEM career (i.e., science and technology-focused).
23. Sponsor more college scholarships for agriculture majors.
24. Forgive student loans for young farmers.
25. Provide mentors and internships for young farmers.

### Land

26. Engage tribal administration, councils and land societies to help communities and families resolve land-use issues in order to get more land into agriculture production.
27. Involve tribes, religious groups and the Bureau of Indian Affairs to develop land-use succession plans for tribal communities.
28. Involve the tribal war councils and chiefs to help communities and families determine the best use for idle lands, taking into consideration how the land has become idle.
29. Encourage tribal administration to formally document land-use agreements among family members.
30. Revive land-use programs that support the traditional values of each community.

### Environment

31. Encourage stewardship as every person's business and life.
32. Communicate ways to reduce our carbon footprint.
33. Use natural ways to clean up the environment (e.g., use gray water systems, engage in sustainable urban development, use sustainable farming practices, follow native traditions that respect the earth).

### Farm to Market & Healthy Food Production

34. Find ways to maintain a level of consistency for the buyer (i.e., pricing consistency leads to market consistency).
35. Provide assistance to farmers and ranchers regarding business plans and resources that are the appropriate scale for their small-to-medium operations.
36. Provide incentives for tribal farmers to participate in markets outside the pueblos (e.g., market healthy foods to schools and other communities).
37. Develop and expand markets for healthy food products.
38. Replicate successful businesses.
39. Develop a website that allows local restaurants to locate and order from local food producers.
40. Assist local growers with transportation.
41. Provide more education on how to sell your products to market locations.
42. Use more social media and website to foster farm-to-market opportunities.
43. Emphasize the health aspects of traditional foods (e.g., blue corn) in marketing promotions.
44. Create and distribute cookbooks with traditional foods and edible rangeland plants.
45. Promote cooking demonstrations with traditional foods and promote their health benefits.
46. Advocate food sovereignty and reclaiming native foods.
47. Establish producer cooperatives and collaboration to meet market demand, storage, inspection and education needs.
48. Support food production among the elderly.
49. Support more women in farming
50. Review and adjust public institutional regulations, vendor requirements and budgets that are not aligned with tribal producers on tribal lands (e.g., Schools require food sellers to have \$2 million in auto insurance, making the assumption that all food sellers use industrial-size trucks.).
51. Address conflicting regulations and certifications and align them by market (i.e., GAP, Organic, USDA inspected/certified).
52. Make certification processes consistent with auditing requirements.
53. Increase the number of certified inspectors and facilities so that products are traceable.

### Seed Sovereignty

54. Encourage collaboration with tribal seed banks.
55. Provide producer education regarding sources of native seeds, how to grow these seeds effectively (e.g., correct soil conditions and altitude), and how to save seeds.
56. Educate the public about the environmental impact of indigenous seeds versus genetically modified seeds.
57. Develop policies regarding the use of natural seeds and genetically-modified seeds (e.g., stronger labeling of seed source).

### Small-scale Production

58. Provide workshops that are specific to the needs of Indian youth and adults.
59. Communicate more broadly regarding available grants available.
60. Target more grants to small producers.
61. Support subsistence farming in addition to market-oriented farming.
62. Encourage NM State University and federal agencies to provide hands-on technical assistance, not webinars, on grant writing and completing grant applications.
63. Simplify loan applications.
64. Simplify language on paperwork required.
65. Expand USDA training and funding support to purchase, upgrade and maintain agriculture equipment.
66. Provide stipends for producers to attend training on equipment
67. Establish cooperative community farms and equipment sharing
68. Involve tribal elders' support and participation in helping small-scale producers.
69. Provide mentors who are unique to each group's culture and traditions.
70. Establish agriculture departments on pueblos.
71. Encourage support from tribal, state, and federal leaders to put native farmers on the forefront of program discussions and funding.

## Meeting Demographics

<b>Stakeholder Groups</b>	<b># Participants</b>	<b>Counties</b>	<b># Participants</b>
Advocacy	1	Bernalillo	10
Commercial Production & Marketing	1	Cibola	11
Education & Research	8	Dona Ana	2
Farming/Ranching	16	McKinley	1
Financial Lending & Grantmaking	3	Rio Arriba	2
Government Support & Regulation	9	Sandoval	12
Media	1	Santa Fe	5
Soil & Water	2	Other	1
Staff (NMF)	3		