Needs Assessments Help Direct Research and Extension for New Livestock Advisors

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Background

- Extension advisors develop and provide science-based information to solve locally-relevant issues.
- It is therefore imperative to develop programs that address local issues and priorities.
- Key to understanding local socio-economic dynamics and knowledge gaps is conducting a needs assessment.
- A **needs assessment** is a systematic approach to identifying interests, knowledge gaps, ability, attitudes, and important issues or problems of a particular group.
- Types of needs assessment include:
  - ➢ Formal and informal interviews
  - ➢ Questionnaire surveys
  - ➢ focus or working groups
- Information from needs assessments guide extension professionals focus their research and extension programs on relevant issues

Methods

- We conducted needs assessments with livestock producers in two regions in the California:
  A) **Central Valley** (Mariposa, Merced, Madera counties) and
  B) **Central Coast** (San Benito, Monterey, Santa Cruz counties).

A) Direct methods:
- **Central Coast:** Devii conducted in-person interviews with 20 ranchers. Interviews took 30 min to 2hours.

- **Central Valley**: Fadzayi used conducted informal interviews or a short questionnaire survey on 48 ranchers.

B) Indirect methods:
- Interview university, local leadership, federal agencies, NGOs etc. about previous work, current issues and problems
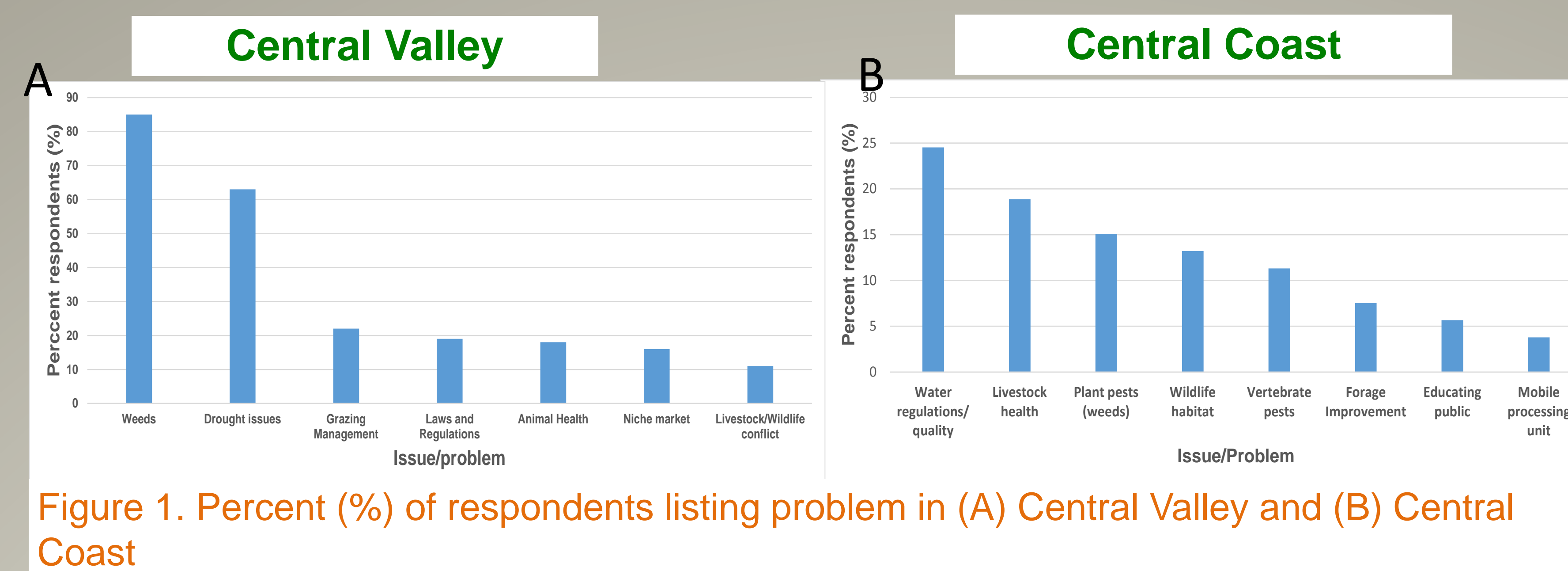- Secondary data reviews

Results

Figure 1. Percent (%) of respondents listing problem in (A) Central Valley and (B) Central Coast
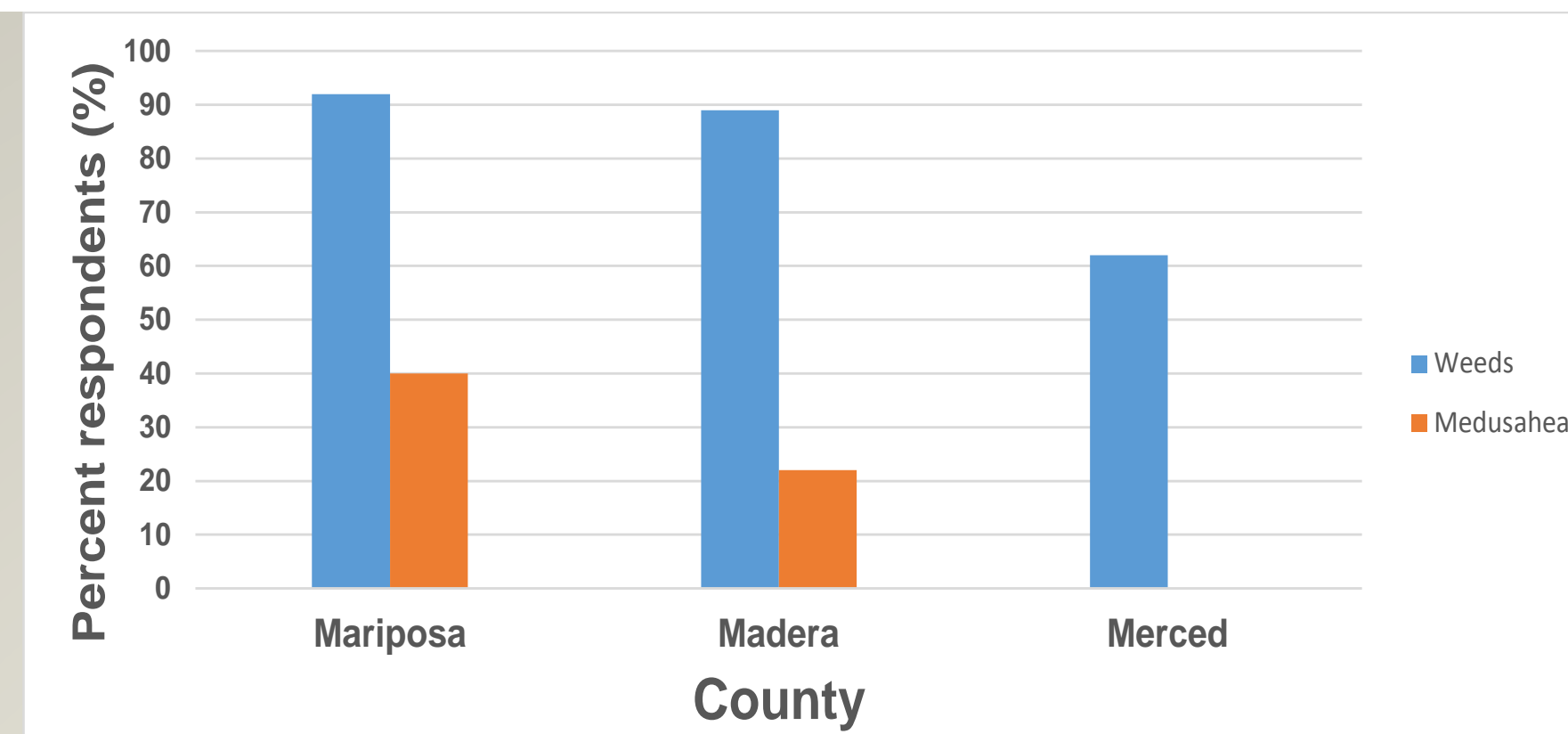

Figure 2. Differences in the importance of weeds and medusahead between counties

- Common issues in both regions include:
  - weed management
  - predator-livestock conflict
  - livestock health and nutrition
  - rangeland management and drought
  - laws and regulations.
- Results also highlight issues specific to each region and even county
- Eg. The invasive species of concern differed among the 3 Central Valley counties: Mariposa – medusahead; Madera – brush species; Merced - weeds in irrigated pastures.
- Our needs assessments also provides information about:
  - local ecosystems
  - production systems
  - past research and extension programs

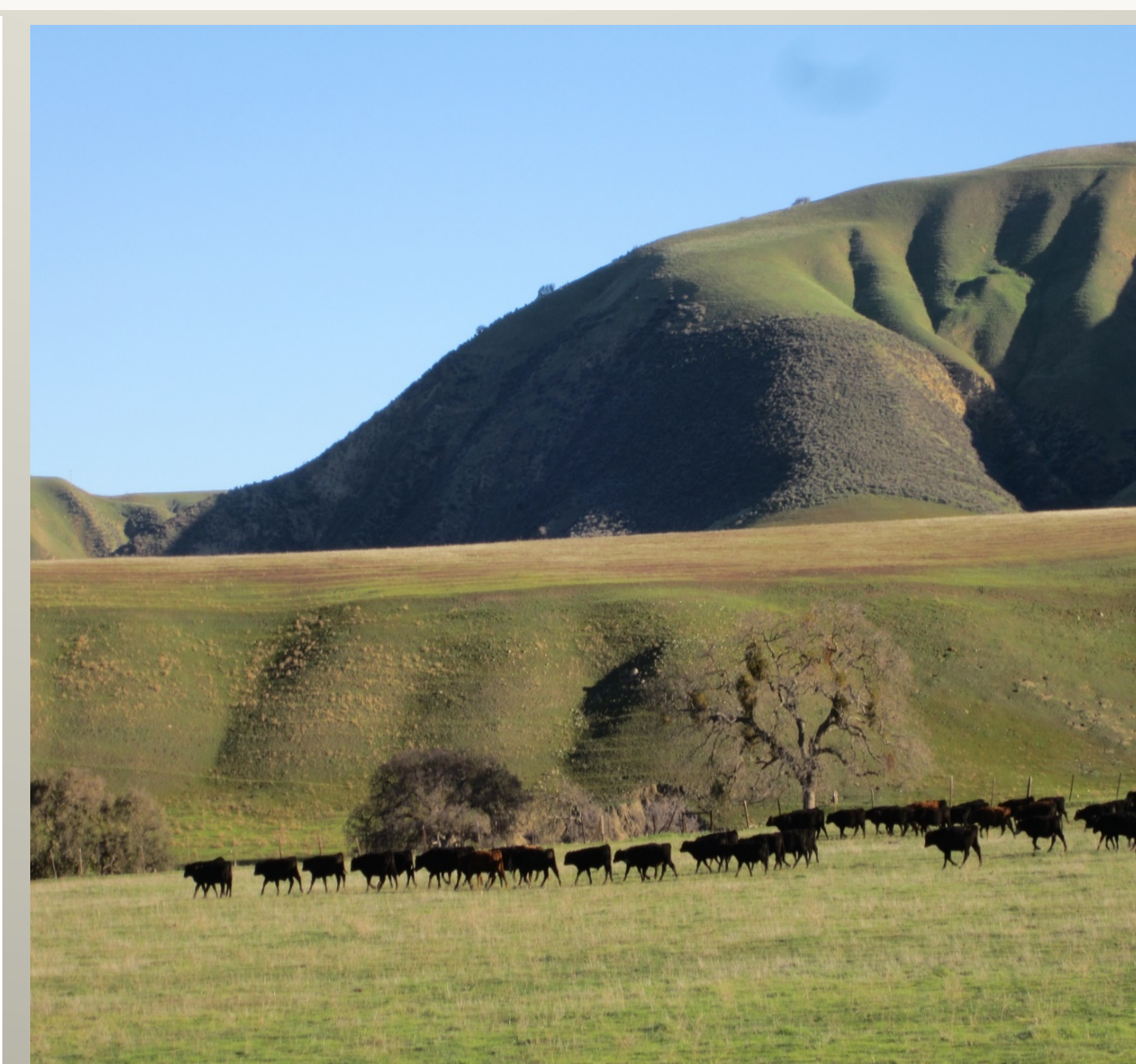Figure 3. Map of California showing the counties covered.

Figure 4. California rangelands

Program Development

Projects in the Central Valley in response to needs Assessment results:
- Experiments and demonstrations of different medusahead control methods
- Niche marketing project
- Grazing and drought management workshops and monitoring

Figure 5. Medusahead demonstration site in Mariposa County

Projects in the Central Coast in response to needs Assessment results:
- Experiments of different Russian thistle control methods
- Forage production monitoring
- Water quality regulation, Beef Quality Assurance and livestock health workshops

Figure 6. Central Coast Rangeland Coalition meeting on water quality and water regulations

Conclusion

- The results highlight that issues differ among communities
- Results from the two regions capture the complexity of issues producers deal with, that advisors need to address to attract the interest of producers.
- Knowing the issues enables the advisors to anticipate and identify :
  - collaborators needed to effectively address issues outside their area of specialization
  - Areas for professional development
  - Ways to involve the producers in developing an implementation plan

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