OHIO STATE UNIVERSITY EXTENSION

Preparing Communities for Shale Development through Sustainable Planning

Economic Impacts - Teaching Outline

Introduction:

According to the U.S. Energy Information Administration, the growing domestic production of natural gas and oil continues to reshape the U.S. energy economy, with crude oil production approaching the historical high achieved in 1970 of 9.6 million barrels per day. This development is fostered by improvements in horizontal hydraulic fracturing processes that have enabled the production of oil and gas from unconventional formations, once considered uneconomical to recover. As a result, rural communities throughout the nation are being affected by the wave of shale energy development and the short and long term economic impacts. This curriculum is intended for use by Extension Educators to teach local appointed and elected officials and engaged stakeholders about the local economic impacts of shale energy development. Using a "train-the-trainer" approach, the initial target audience is Extension Educators and the intended external audience is community leaders and residents. The design of this program is to help Extension Educators build their capacity to assess their regional economy and identify economic impacts of shale energy development. It is also designed to highlight the importance of long term strategic planning to promote economic diversity and viability that transcends the shale energy development.

Learning Objectives:

Community and economic development professionals are seeking to identify and understand strategies that will sustain community vitality and economic growth. The new wave of shale energy development, can provide an economic boom that includes employment opportunities in oil and gas drilling operations, midstream infrastructure construction, transportation, a growing demand for public and private goods and services, as well as increasing tax revenues and large sums of money for individual landowners. Ultimately, this module will help participants identify changes that are occurring in a local economy, to better inform community leaders about which industry sectors are growing or contracting. This data will inform the development of strategic planning initiatives to leverage local revenue to support the advancement of innovation, entrepreneurship, and cluster development to promote economic diversity.

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Process Used: Presentation, discussion, interactive activities for small work groups, some self-managed. Power point slides and audio narrations for each slide are provided.

Length: The module (presentation, discussion, and activities) can be accomplished in 90 minutes. However, two hours will allow more time for discussion and in-depth analysis.

I. Presentation

(45 minutes – Extension Educators)

Use power point slides and audio narration. The audio narrative is designed to provide information for each individual slide that the instructor can use to prepare and customize their presentation.

Purpose:

Provide an overview of economic impacts of shale development including the following topics:

- a) Review shale energy development activity in the region
- b) Overview of economic and demographic trends



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- c) Analyze employment change by sector
- d) Review cluster development and discuss regional clusters
- e) Discuss planning strategies for long-term economic diversity strategy identification

Outcome:

- a) Participants will have a general knowledge of shale energy development and the characteristics of the economic cycles that may result.
- b) Participants will clearly understand how to use economic indicator data to support decision-making.
- c) Participants will analyze regional supply chains and economic clusters.
- d) Participants will learn the role of long term strategic planning to promote economic diversity and viability that transcends the shale energy development.

II. Set up the Interactive Exercise (5 minutes)

- a) Following the presentation, the exercise begins with a short Q&A session and a discussion of the regional economic clusters and their relation to shale energy development.
- b) Break into self-facilitated small groups, organized by community, for the remainder of the exercise.
- c) Distribute the exercise handout with questions, allow participants to review materials, ask questions and receive clarification of the exercise (this will provide the opportunity to share concepts and knowledge that participants will need to conduct the exercise)

III. Engage in the Interactive Exercise

(30 minutes; small group exercise, group participants with guidance from Extension Educators)

- a) (10 min.) Identify appropriate strategies to engage the community in the economic strategic planning process and outline action steps.
- b) (10 min) Conduct an economic assessment of the community/region and identify appropriate strategies/initiatives (i.e. promote economic diversity, cluster development, workforce training, entrepreneurship development, building an entrepreneur friendly community culture, building on community assets, tourism) and identify the appropriate implementation steps.
- c) Each group has 2 3 minutes to present their discussion and results to the other groups.

IV. Debrief

(10 minutes; group discussion facilitated by Extension Educators)

- a) Share what participants learned and how they might apply this knowledge in their own communities
- b) Identify techniques and share materials that can be applied with other groups

V. Materials

The educational materials in this module provided to participants will include:

- a) Video presentation
- b) PowerPoint template
- c) Handout Using Location Quotients in Cluster Analysis
- d) Program evaluation template
- e) Handouts for the interactive exercise

VI. Supplies Needed by Instructor

a) Flip charts and markers for each workgroup – to be used to record their decision-making results for presentation to rest of group



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- b) LCD projector and laptop to project power point slides
- c) Copy of materials for each participant

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