#### Background

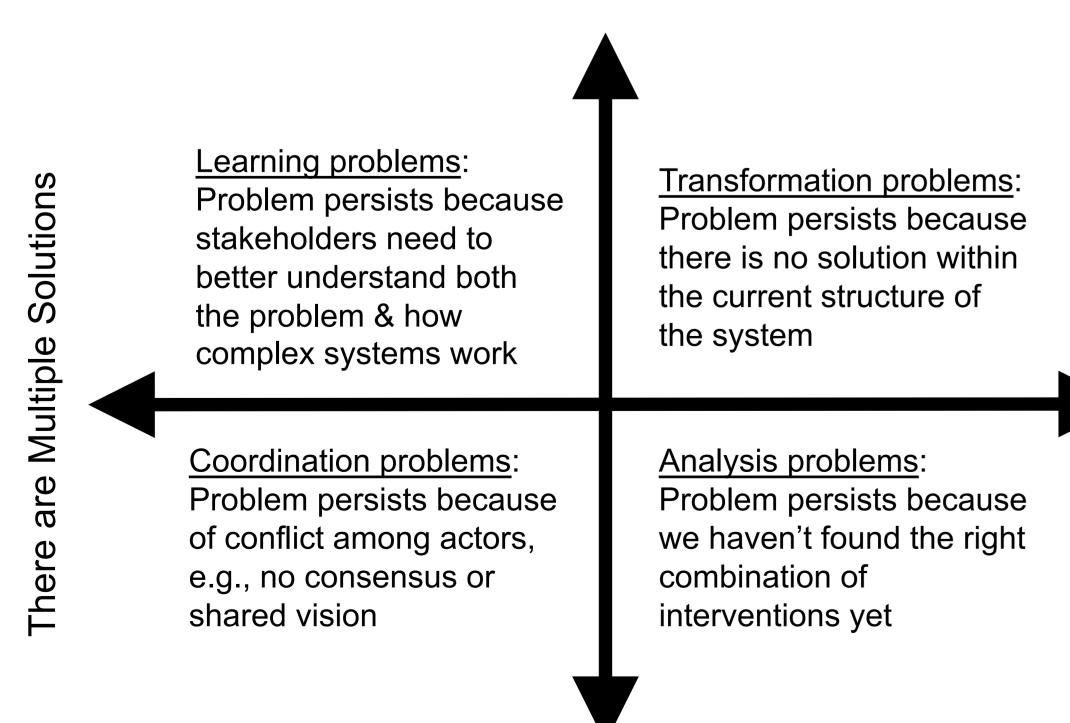
- Community partner: Butler County Community Resource Center (CRC), a non-profit organization in Poplar Bluff, Missouri, in the rural Midwest of the United States
- Among many initiatives, the CRC leads the Butler County Wellness Council, which promotes physical activity, nutrition, and healthy habits, e.g., community gardens
- Wellness Council members represent many sectors and actors, e.g., parks and recreation, the local health department, University of Missouri Extension, individual community gardeners, etc.
- All are invested in the community garden, but there is a diversity of opinion about garden priorities, policies, goals, and visions according to Council members' sectors
- The system of community gardens recently underwent changes, i.e., relocating a garden and acquiring new funding, which was an opportunity to develop a shared vision for the future of community gardening in Poplar Bluff.
- **Project Goal:** Use a Group Model Building (GMB) approach to facilitate a shared understanding of the diversity of visions and priorities for the the gardens, and how those goals are interrelated.

#### **Co-design Process for Workshop Development**

- Conducted preliminary online mini-workshop with CRC leadership to introduce partners to the GMB method, deepen our relationship, assess feasibility of GMB, learn about the garden, and begin to identify key themes
- Worked with CRC leadership to identify key design features to ensure GMB workshop success & account for needed COVID-19 adaptations
- Key stakeholder interviews were conducted to get to know Wellness Council participants, identify current mental models, build trust & investment in the success of the workshops, gather input on workshop design, and identify any potential risks.
- Interviews revealed important missing context and a realization that part of the problem was a lack of shared understanding of the past and present of community gardening. This indicated a coordination problem (Hovmand 2014, Figure 1)

#### **Figure 1.** Different Types of Systems Problems<sup>1</sup>

Change the Current System



Keep the Current System



## Using Group Model Building to Develop a Shared Mental Model of **Community Gardening in Rural Missouri**

Sarah R. Pritchard, Simon Cozzens, Ebuwa I. Evbuoma-Fike, Clarissa Gaona Romero, and Stephanie Mazzucca-Ragan Washington University in St. Louis

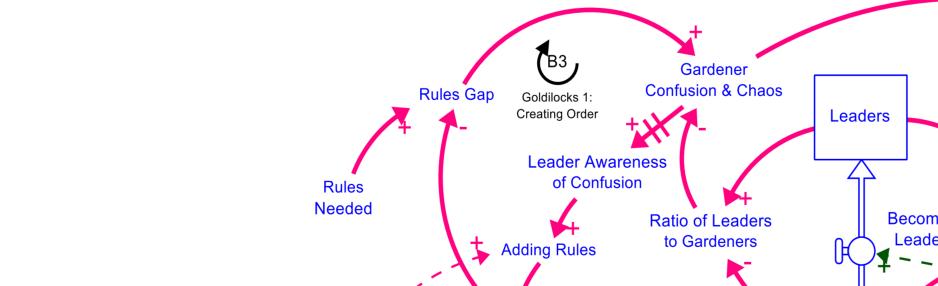
#### Figure 2. Adapting GMB Workshop Based on Input from Stakeholders

#### **Key Insights from Stakeholder Interviews**

- There are actually <u>nine</u> community gardens, not two as initially described!
- Unawareness of each other's garden sites
- No hypotheses about each others' goals/visions
- Conflicting mental models of community gardening
- Lack of awareness of multiple approaches to community gardening
- These differences and blind spots contributed to tension within the group



- Switched focus from success of new garden  $\rightarrow$  success of *community gardening* in Poplar Bluff, MO
- Created an "Oral History & Education" script to get participants on the same page about the history and context of community gardening in their town
- Education on community gardening frameworks
- Timeline activity to build an oral history
- Goals of Oral History & Education script:
- Inform council of the total number of gardens Raise awareness of different approaches to
- community gardening Normalize difference in gardening approaches - no
- right or wrong way!



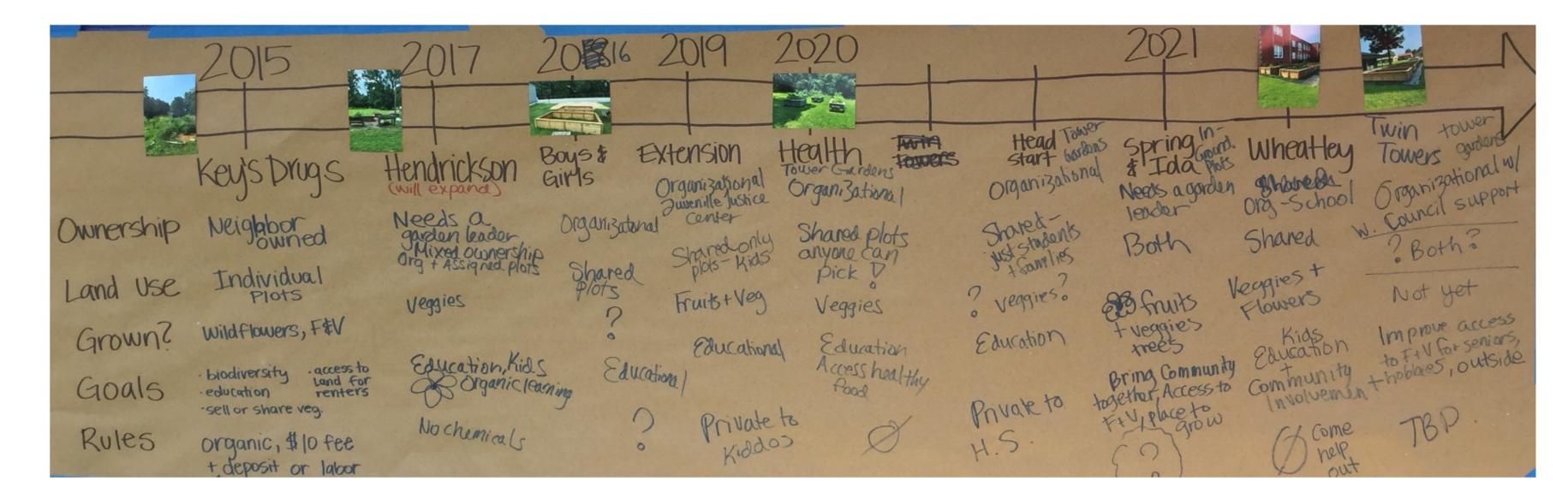
#### Figure 4. Final Qualitative Model

Prescri**p**tivenes Sense of F & Community Momentum Many Rules Expected Goldilocks Sense of Jntying Leader Promoting Ownershi Ownership Sacrificing Gardener Sense Too Much of Ownership of Discontent **Being Selective** About Grants With Attrition **Council Awareness B**8 Frustration About of Discontent Need for Rework Supporting Quality of Communication Between Leaders & Within Council & Gardeners Council Intervening Overburdenin to Support of Workers Too Busy To Notice Problems

### **Oral History Script and Workshop Design**

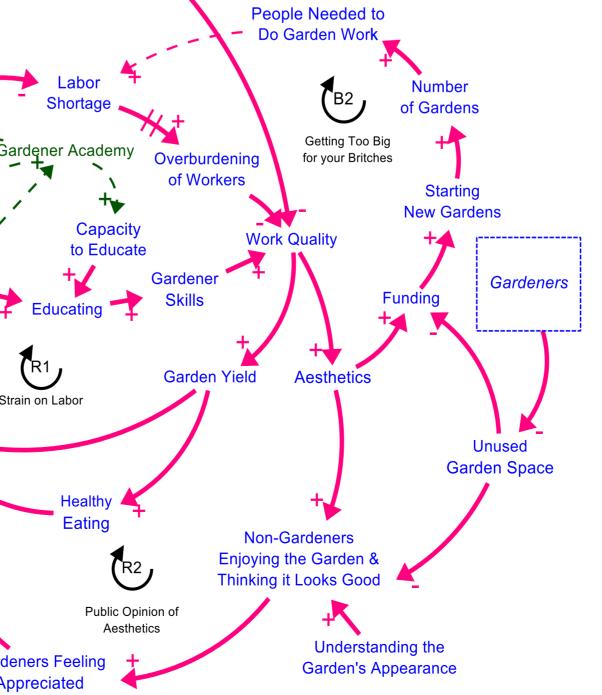
- We created an Oral History & Education GMB script based on the interviews to increase the Wellness Council's collective understanding of the network of community gardens in their community and its history (Figure 2)
- The added script resulted in a timeline that showed the history of the multiple community gardens in Poplar Bluff and their goals (Figure 3), and filled knowledge gaps that the Wellness Council members had about the existing system
- After this activity, participants created connection circles and CLDs, from which we produced a synthesized model that was edited by participants on Day Two. Participants then generated action ideas & implementation strategies.

#### **Figure 3.** Oral History Timeline



#### **Observations & Outcomes**

- Participants identified numerous motivations for garden participation which they hadn't mentioned in the preworkshop interviews, indicating increased understanding of others' goals and perspectives E.g., Having fun, building community, sense of ownership, healthy eating, garden yield, gardening education...
- Action ideas generated by participants indicated increased understanding and acceptance that different gardens have different priorities and ways of operating, increased ability to distinguish the different roles played by the Wellness Council vs. individual community gardens, and the growth of shared priorities and vision for success at the Council-level while supporting diversity at the garden-level
- Adjusting the workshop agenda to address knowledge gaps and sources of tension among Wellness Council members allowed participants to articulate their own beliefs and work together to create a shared qualitative model that depicts the system of factors that influence the success of community gardening in Popular Bluff
- The GMB process and qualitative modeling supported Wellness Council members in developing operational insights that they could use in monitoring & implementation planning



# Land Acknowledgement

- Kickapoo Tribe, Kaskaskia, and Miami Nation.
- community benefits from their removal.
- are leaders in systems change and public health
- stewarded these lands.

Not Enough Leaders



This work was conducted on the stolen lands of the Osage Nation, Quapaw Nation, Oglala Lakota Nation, Illini Confederacy, Otoe-Missouria Tribe,

The Indigenous people of these nations were removed unjustly by the United States government and by white settlers, and the Washington University

Colonization is ongoing but Indigenous people are still here, still thriving, and

Please join us in honoring the Indigenous people and nations who have