

Co-Developing Maine's Agriculture and Arts Economies

A LIVING LABORATORY TO ACCELERATE CLIMATE SMART AGRICULTURE & SUSTAINABILITY SCIENCE IMPLEMENTATION THROUGH SMALL BUSINESS TECHNOLOGY TRANSFER

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TILTH
ARTS & AGRICULTURE



OVERVIEW

SMALL AND FAMILY FARMS IN MAINE AND NATIONALLY ARE HISTORICALLY CORNERSTONES OF RURAL COMMUNITY DEVELOPMENT. THIS RESEARCH FOCUSED ON NOVEL ARTS AGRICULTURE CO-DEVELOPMENT OVER THE PAST DECADE AND DEVELOPED AN ECONOMIC DEVELOPMENT FRAMEWORK FOR SMALL BUSINESS TECHNOLOGY TRANSFER PROGRAMMING THAT ACCELERATES CLIMATE SMART AGRICULTURE AND SUSTAINABILITY SCIENCE IMPLEMENTATION WHILE CENTERING FARMERS & FOOD

ANALYSIS

INCENTIVIZING LONG RANGE PUBLIC/PRIVATE PARTNERSHIPS THAT CENTER ARTS AND SMALL FARM TALENT AND INNOVATION TOGETHER, IN A CODEVELOPMENT STRATEGY ALONG WITH NEW MEDIA, AGRICULTURE, ENGINEERING AND FOOD SYSTEMS TALENT POOLS AND INFRASTRUCTURE, IS BETTER FOR SOCIETY THAN SINGLE DISCIPLINE SHORT RANGE OR VENTURE TARGETED ECONOMIC DEVELOPMENT PATHWAYS. IN THIS WAY, ARTS BASED ECONOMIC DEVELOPMENT SERVES A SUPPORTIVE LINK BETWEEN "7 TECHNOLOGY AREAS" LED BY MAINE TECHNOLOGY INSTITUTE. IMPLEMENTING CODEVELOPMENT STRATEGIES IN RURAL COMMUNITIES MAY HAVE IMPLICATIONS FOR RURAL DEVELOPMENT AND MAINE'S ENTREPRENEURIAL ECOSYSTEM, AND PORTIONS OF MCED'S 10 YEAR STRATEGY.

IN SOME COMMUNITIES THIS CODEVELOPMENT IS SUPPORTING THE RETOOLING OF MAINE'S SMALL AND FAMILY FARM SECTOR AND RELATIVE RURAL COMMUNITY CENTERS WHILE BROADCASTING AND CAPITALIZING THEIR VALUE BEYOND THE REACH OF MAINE'S SPECIALTY AND COMMODITY PRODUCTS ALONE.

RESEARCH IMPLEMENTATION; A LIVING LABORATORY FOR PARTICIPATORY ACTION RESEARCH AND SMALL BUSINESS DEVELOPMENT



FAIR MOUNT FARM

Participatory Action Research & Implementation Living Laboratory
10.5 acre public facing farm and infrastructure

Integrated Environmental Humanities & Arts
programming, symposia and summer stage relational to research outcomes

Business Development Programs:

- **Tilth Accelerator Program;** 2 year business development
- **Tilth Artist in Residence Program** 2 week - 9 month project support

OUTCOMES

PROJECT OUTCOMES LEAD TO THE DEVELOPMENT OF THE **LIVING LABORATORY** RESEARCH PROGRAM **FAIR MOUNT FARM**, AND THE INCORPORATION OF FAIR MOUNT'S UMBRELLA ORGANIZATION **TILTH ARTS AND AGRICULTURE**, IN **BLUE HILL, MAINE**. TILTH SERVES AS A MISSION DRIVEN COMMUNITY DEVELOPMENT HUB, AND A MODEL FOR PILOTING PUBLIC PRIVATE PARTNERSHIP AND TECHNOLOGY TRANSFER PROJECTS THROUGH PARTICIPATORY ACTION RESEARCH. PROGRAM TARGETS ARE OUTCOMES OF SOIL AND WATER CONSERVATION, STEM, SUSTAINABILITY SCIENCE INNOVATION AND MEET A GROWING NEED TO ACCELERATE IMPLEMENTATION AND ECONOMIC DEVELOPMENT

TILTH'S INNOVATION ACCELERATOR APPROACH EMPLOYS **ENVIRONMENTAL HUMANITIES** PROGRAMMING ALONGSIDE SMALL BUSINESS SERVICE PROVIDER PROGRAMMING TO ACCELERATE THE TRANSFER OF PROVEN **CLIMATE SMART AGRICULTURE, SUSTAINABILITY SCIENCE** IN THE PUBLIC RESEARCH SECTOR INTO **POSITIVE CULTURAL & SOCIOECONOMIC RESPONSES** FROM MAINE'S SMALL BUSINESS SECTOR.

TILTH ACCELERATOR PROGRAM TARGETS:

- **DIURNAL HEAT SINKS & HVAC** IN YEAR ROUND SOIL BASED GREENHOUSES
- **FIELD PFAS BIOREMEDIATION** WITH **NANOCELLULOSE, FUNGI & BIOCHAR**
- **A MAINE SMALL FARM 'WIRELESS SENSOR NETWORK COMMON SERVER'**
- **DIGITAL FARMERS MARKETS** FOR MAINE'S SMALL & FAMILY FARMS
- **CO-DEVELOPMENT OF ARTS & FOOD SYSTEMS** IN MAINE ECONOMIC DEVELOPMENT

ANTICIPATED OUTCOMES FROM FIELD DEMONSTRATION AND PARTICIPATORY ACTION RESEARCH AT THE FAIR MOUNT FARM LIVING LABORATORY, HELP FILTER VIABLE "**TILTH ACCELERATOR**"; PROGRAMS THAT TARGET INTO THE U.S. SMALL BUSINESS ADMINISTRATIONS SMALL BUSINESS TECHNOLOGY TRANSFER FUNDING THAT SPECIFICALLY CENTERS **CO-DEVELOPMENT OF ENVIRONMENTAL ARTS, HUMANITIES, TOURISM AND STEM INNOVATION** RELATIVE TO THE SMALL AND FAMILY FARM SECTOR AS A RURAL ECONOMIC DEVELOPMENT FRAMEWORK THAT IMPLEMENTS INNOVATIVE RESEARCH.

SERVICE PROVIDER AND BUSINESS CONSULTING PROGRAMS



COLLABORATORS



CMRC CENTER

