

**KANDIYOHI COUNTY AND CITY OF WILLMAR ECONOMIC DEVELOPMENT COMMISSION (EDC)  
AGRICULTURE AND RENEWABLE ENERGY DEVELOPMENT (AG) COMMITTEE**

**MINUTES**

**August 18, 2016**

**Christianson & Associates, PLLP, Willmar**

Present: Arvind Auluck-Wilson, Rollie Boll, Ian Graue, Kevin Halvorson and Keith Poier

Excused: Jon Folkedahl, Dustin Kotrba, Dan Lippert and Dan Tepfer

Absent: John Duevel, Larry Konsterlie, Kim Larson and Bruce Reuss

Guests: Dana Anderson, PhD; CEO, Living Greens Farm; and John Anderson

Staff: Connie Schmoll, Business Development Specialist

Secretarial: Diane Beck, Legal & Administrative Assistants, Inc.

Chairperson Ian Graue called the meeting to order at approximately 7:35 a.m. The agenda was approved as emailed. Self-introductions were conducted.

**MINUTES**—As there was not a quorum in attendance, the July 21, 2016 minutes were received but not approved.

**Living Greens Farm Presentation.** Connie Schmoll introduced Dana Anderson. Anderson has a PhD in investment theory and is the CEO of Living Greens Farm in Faribault, MN. Anderson started Living Greens Farm in 2011. Living Greens Farm is a vertical-type indoor farming process which uses a hydroponics and aeroponics farming system that dramatically decreases crop waste and addresses major problems facing the current agriculture industry. Their system uses a non-soil based farming system to grow leafy green vegetables and herbs using no pesticides. Ninety-five percent less water is used compared to soil-raised crops. Lighting is derived from incandescent and skylights. Currently, 80 percent of the lettuce is grown in California and Mexico using a soil-based farming process and a great amount of waste is realized due to the five-days it takes to harvest and clean lettuce prior to shipping. Living Greens Farm holds two patents and have 10 pending. Living Greens Farm has met with various grocery chains that are in favor of a better product. There is a \$7 million market available east of the Mississippi.

Question/Answer Session:

Q: Why hasn't aeroponics taken off until now?

A: Mainly due to the high cost to use the aeroponics system. Living Greens Farm has developed its best-in-class system that translates positively across the value chain to

efficiently deliver a better product at a lower cost. They can produce a head of lettuce for \$.60, including labor and utilities; cost does not include packaging and delivery. The vertical panels can be 32-feet in length or longer. Each panel is capable of growing a crop equal to one acre of land.

Q: Profitability?

A: Costs include electricity plus labor costs which consist of 2½-3 employees for a 10-unit system

Q: What are the training requirements for employees?

A: Need one highly skilled employee.

Q: What is the cost to start a business?

A: Grow stations sell for \$50,000/piece plus \$25/30 sq. ft. to retrofit a warehouse

Q: Is there a great amount of humidity or mold in a building due to the amount of water used?

A: Buildings are maintained at 70% humidity; they follow a certification system. The cycle time eliminates the growth of contamination.

Q: Are warehouses or greenhouses preferred for the aeroponics system?

A: Living Greens Farm has skylights in the warehouse; they have not experimented with using greenhouses as installation of solar units are needed.

Anderson explained the watering system. The vertical panels are watered by wands inside of the units which move on a trolley; the water is recycled.

Arvind Auluck-Wilson suggested Anderson meet with Superintendent Paul Carlson at the New London-Spicer High School to discuss this business opportunity. Living Greens Farm is looking for people interested in franchise opportunities. The cost per grow station is \$50,000 with a 2-3-year payback. There is a service fee of \$1500 per grow station for training and support. Keith Poier inquired if Living Greens Farm has a contact. Anderson shared they sell products to 11 accounts and have a contract with General Mills. Discussions have been also conducted with Coburns and HyVee.

Schmoll thanked Anderson for the interesting presentation and informing the Ag Committee of the opportunity for a system in this area. Committee members are encouraged to spread the word for this opportunity. Anderson will send Schmoll a link to his presentation and she will email it to committee members.

## REPORTS

**Ag Investment Planning Subcommittee.** Schmoll provided an update. Membership has grown from 13 to 23. Potential investors have until September 2, 2016 to fill out an application and pay a \$1,000 initial investment. With the current membership, the fund will be over the \$1 million fund balance.

**Ag BRE Survey Subcommittee.** Schmoll reported the Ag BRE Survey Subcommittee met on August 30, 2016 to continue planning for the Ag survey which will be conducted in January/February 2017. Changes were made to the survey form used in 2005. Pauline Van Nurden of the University of Minnesota Extension Service recently joined the subcommittee. Schmoll mentioned volunteers are needed to conduct the surveys. Contact Schmoll if interested.

#### **NEW BUSINESS**

**2016 Ag goals.** Schmoll reminded committee members the 2016 Ag goals will be discussed at meetings every other month and will be placed on the November agenda.

#### **UNFINISHED BUSINESS**

**Animal Science Conference.** Schmoll reported the Animal Science Conference will be held on September 20, 2016 at the MinnWest Technology Campus. Schmoll, Dan Tepfer and Kim Larson have met to work on information for the Ag Committee booth. Schmoll encouraged committee members to go online and register for the conference.

**Community happenings in agriculture/renewable energy.** Schmoll recently attended the Community Venture Network (CVN) session in St. Paul and reported interesting presentations regarding food processing businesses and a solar panel business were made. She may invite one of the presenters to a future Ag Committee meeting. When asked if Ag Committee members could attend a CVN meeting, Schmoll stated CVN is a membership-based organization but will check with Justin Erickson, CVN Coordinator. Schmoll shared she received a thank you letter from Ridgewater College for EDC's sponsorship of the Ridgewater Ag Reunion & Alumni Kickoff which will be held Friday, August 19, 2016. Auluck-Wilson will be attending; one ticket remains. Contact Schmoll to reserve the ticket.

Schmoll suggested cancelling the September Ag Committee meeting instead of the October meeting due to an early harvest season. Committee members concurred. Schmoll will send an email announcing the date change.

**ADJOURNMENT**—There being no further business, the meeting was adjourned at approximately 8:33 a.m.

**NEXT MEETING**—The next regular meeting is **7:30 a.m., Thursday, October 20, 2016**, at Christianson & Associates, PLLP, Willmar.