

Jubilee Justice Black Farmers Rice Project

Review 2021



Jubilee Justice Black Farmers Rice Project

Founded by Konda Mason in 2019 with the goal to transform livelihoods of Black farming communities through regenerative SRI rice production



Alexandria, Louisiana



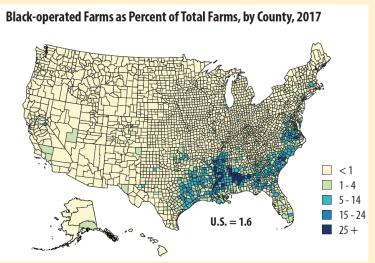
Mound Bayou, Mississippi



Jackson, Mississippi

Background

- Systematic discriminatory practices from loan agencies, extension offices, and the USDA have forced Black farmers out of landownership and farming since the early 20th Century.
- The number of Black farmers has decreased from one million farmers in 1920 to less than 33,000 in 2017.
- Most Black farms are concentrated in the Southeast, which is where Jubilee Justice is focusing its work.



Based on 32,910 farms with producers who identified as Black alone

Black-operated and U.S. Farms by Economic Class, 2017 (percent) (sales and government payments combined)				
< \$1,000	23			
\$1,000 to \$4,999	27			
\$5,000 to \$9,999	15 11 ■ Black-operated			
\$10,000 to \$49,999	21 All U.S. 20			
\$50,000 +	7 25			
	ı			

57% of black-operated farms and gov payments of less than \$5000 per year; 7% had \$50,000 and more, compared to 25% of all farms

Farm Size in Acres	Black- operated	AII U.S.
	(percent of total)	
1 to 9	16	13
10 to 49	36	29
50 to 179	33	28
180 to 499	11	15
500 +	4	15

85% of black-operated farms were smaller than 180 acres, compared to 60% of all farms

Background

Origin of rice production in the USA

- Rice was first introduced to USA in the late 17th Century.
- Technical knowledge of growing rice in the tidal swamps of South Carolina came from the enslaved Africans who successfully produced rice in these difficult environments. Soon, rice became the most important plantation crop in SC.



Rice production in the USA today

- Commodity large-scale farming
- High agro-chemical use (sprayed by airplanes)
- Permanently flooded fields, emitting methane
- Very few rice varieties (long and medium grain)
- Very low price and profit margins for farmers

Creates toxic landscapes – biodiversity deserts – soil degradation - greenhouse gas emissions – arsenic in rice



Regenerative, climate-friendly alternatives exist



The System of Rice Intensification



The System of Rice Intensification (SRI) is an ecological approach to rice production based on improved soils, reduced irrigation water, and giving plants more space to fully develop their potential. SRI has been successfully implemented in more than 50 countries, but not yet at scale in the USA.

With SRI, rice yields are increased and soils improved, while using less seed, water, chemicals, and emitting less greenhouse gases.

Jubilee Justice, together with the Black farming community, have set out to change the way rice is grown in the USA:

Regenerative, no-till and organic SRI rice production

Jubilee Justice Rice Project

Vision: Black farming communities in the USA farm more land, thrive economically and have an improved quality

of life

Mission: Support black farming communities in implementing sustainable and regenerative crop production

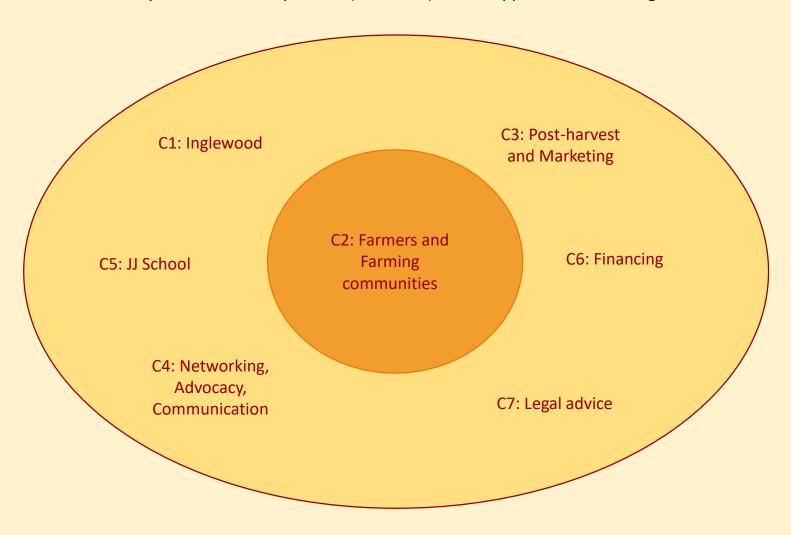
practices, accessing new markets, sustainable financing and legal services in LA, MS, SC, GA and CA

Components and Activities: there are seven components that lead to the implementation of JJ's mission. In 2020 (year 1) JJ started with C1, C2. In 2021, JJ focused on C1, C2, C3, C4 and C6. In 2022, all components will be included.

6. Finance 4. Networking, 3. Postharvest, 2. Farmers 1. Inglewood 5. JJ School 7. Legal suppor Components Advocacy, **POTLIKKER** Market Communications Develop training Potlikker is a sister · Processing (mill, · Legal outreach and SRI Rice production JJ Headquarters Objectives · Connection with materials harvest) organization to JJ Other crops production advice to interested Experimentation Black organizations WHAT? · Branding/marketing Internships farmers · Transition to Seed production (BO) Market access and Teach at HBCUs Support farmers Crop production regenerative/organic Outreach and Others Create choice farming School/training advocacy activities independence Create independence · Demonstration site Publications Income increase · Increased income Develop/update legal Curriculum Assist farmers in harvest. Identify farmers • 5-acre farm design · Provide training/ know-Activities Institutional mapping information material development threshing, drying, Grant-making Infrastructure how and connecting with • Set up a call desk? Technical manuals HOW? storing, milling and Loan-making Farm equipment (EQ) Assist in EQ BOs · Promote information · Lectures, seminars, selling their rice Follow-up Greenhouse · Technical assistance Develop Set up and run mill training courses Field days/trainings support and communication Branding and packaging · Advice service (Call • "Farming" the land troubleshoot strategy desk?) of produce Community of practice Publications · Market access: Lotus Talks foods, self-marketing Visits/outreach

Jubilee Justice Rice Project

The farmers and farming communities (Component 2) are at the core of all activities undertaken by JJ. All other components (C1, C3-C7) are in support of the farming communities.

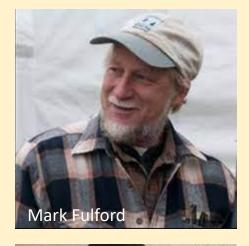


JJ Rice Project Team





















Review 2021

- 1. Regenerative Crop Production Research
- 2. Jubilee Justice Farm Headquarters at Inglewood
- 3. Jubilee Justice Black Farmers Cohort
- 4. Jubilee Justice Rice Mill
- 5. Partnerships, Collaboration, and Outreach

1. Regenerative Crop Production Research





Regenerative Crop Production Research

We conducted field research on rice, other crops, weed and soil fertility management

- Jubilee Justice Farm Headquarters:
 - Rice variety testing
 - Cover crop research
 - Clover/rice intercrop trial
 - Rotation crop screening trials: winter wheat, fall beans, summer cowpeas and sesame varieties
- On-site Farmer trials
 - Each farmer tested a slightly different rice planting system, among them:
 - Transplanting vs direct seeding rice
 - Variety trials
 - Fabric, plastic or bare ground
 - Narrow vs wide spacing of rice plants

Experimental set up for rice trials in 2020 and 2021 at Inglewood, LA

- In 2020 and in 2021, we tested 18 and 24 specialty rice varieties, respectively, on one acre, planted on
 raised beds and covered by fabric. The use of fabric allowed the Jubilee Justice team to plant an entire
 acre and collect data on plant performance without having to worry about weed control.
- Fabric helps to suppress weeds but it does not allow for improving and regenerating soils. After the
 rice was harvested, we experimented with removing the fabric and planted different cover crops (CC)
 as well as beans and small grains as fall and winter crops. This was done with the goal to keep soils
 covered and productive year-round. This is not a common practice in the US South, where soils are
 kept bare over winter in the traditional agriculture systems.

1. Rice Trials with raised beds on fabric







2. Cover crop trials in the fall and winter of 2020/2021











18 Rice Varieties

sourced from USDA were tested in 2020 with the SRI

Measurements included: plant tillering and height, production cycle, survival, pest and disease pressure and yield.

Most promising varieties:

- HB1 (black rice)
- Scarlett (red rice)
- Jasmine
- Presidio
- IITA 119 (red rice)
- Arborio

Rice variety trials in Alexandria, LA 2020 and 2021

Below are the 18 varieties planted with the SRI methodology at 60 days after transplanting.

We use images to assess the *vigor* of each variety.



Fall and Winter Crop Trials 2020: Cool Season Crops

Fall Beans trial, 2020

- 11 Bush and Pole Bean Varieties were evaluated on fabric and rice straw mulch.
- Most prominent fungal disease: rust
- The short cycle varieties can be grown as rotation crop following rice and before planting a winter cover crop.
- Top five varieties were:
 - Turkey Craw

 Pole Bean
 - Pencil Pod Black Wax

 Bush Bean
 - Tiger Eye— Bush Bean
 - Jackson Wonder

 Bush Lima Bean

Jacob's Cattle

– Bush Bean

Winter Grain SWI trials, 2020

- 51 Winter Grain Varieties were planted with the SRI method applied to wheat (=SWI method): plants spaced 12"x12" grid
- Grains planted were wheat, oats, barley, rye, einkorn, spelt, triticale, emmer, and timopheevii.
- Major challenges: lodging and disease issues
- Top five varieties included:
 - Hilliard Soft Red Winter Wheat
 - **Aroostoock Winter Rye**
 - **Expedition Wheat**
 - Norin 10 Wheat
 - Pelon Colorado Wheat



Summer Crop Trials 2021: Rice Variety Trials on Fabric

- Goal: Repeat variety test from 2020, and add a few upland varieties, named Gopher varieties, resulting in a total of 24 Rice varieties tested.
- · Observations: Plant development (tiller numbers, height), survival, disease pressure and yield
- Lessons learned:
 - The soil where the rice trial was planted was depleted in organic matter and beneficial soil biota, which favored disease pressure.
 - Fungal disease pressure was very high, especially during rice maturation phase
 - Irrigation needs in the middle of summer exceeded the ability to irrigate (insufficient infrastructure)
 - Highest yielding varieties were: IITA 119 (red rice), Neches, Wells, Presidio, Cheniere.
 - Highest tillering varieties: Jasmine 85, Charleston Gold, HB1 (black rice), Jupiter, Presidio
 - We expect that with improved soil health and irrigation availability, yields of currently lower-yielding varieties will increase. We therefore will stay open-minded to further test medium-performing varieties.
 - The best yielding varieties have shown to be very robust when faced with adverse effects (low soil fertility, low water availability and high disease pressure)





Summer Crop Trials 2021: Warm Season Crops

Sesame variety trial, 2021

- Goal: find a summer rotation crop for rice that is not a legume or a grass
- **5** Sesame Varieties were planted on fabric with wide spacing
- Sesame improves soil tilth, deep root system
- Highly disease resistant, similar crop cycles
- Listed from highest to lowest yield:
 - Monticello White
 - Southern Exposure Benne
 - Afghan Sesame
 - David Shields' Benne
 - Blue Sesame



Cowpea variety trial, 2021

- Goal: find a leguminous summer rotation crop for rice
- 16 cowpea varieties were planted on fabric with wide spacing
- Observations: growth habit, disease resistance, weed suppression capabilities, yield.
- Top five varieties were:







2. Jubilee Justice Farm Headquarters

- JJ Farm Headquarters (HQ): Jubilee Justice has leased five acres on Inglewood farm, a certified organic farm in Alexandria, Louisiana.
- The JJ farm HQ has multiple objectives:
 - JJ staff headquarters
 - Field research
 - Variety screening for rice and other crops
 - Soil health, cover crop and integrated crop rotation research
 - Seed and seedling production of rice varieties, specialty crops and cover crops to be shared/sold with JJ and other farmers
 - Demonstration site for regenerative farming innovations
 - Production, milling and selling of rice and specialty crops to create an income stream for JJ.
 - JJ School, a training and knowledge hub for JJ farmers (to be developed)

2. Jubilee Justice Farm Headquarters

In 2021, the JJ 5 Acres were set-up in order to be fully operational as a farm in the 2022 agricultural season:

- Operational farm team hired.
 - Farm manager : Iriel Edwards
 - Head of Logistics: Smiley Mason
 - Seed, Harvest, and Compost Manager: Darlene Domino
 - Head of Property and Production: Jose Gonzalez
 - Farm Production and Equipment Manager: Hector Rios
- Farm plan developed: parceling fields, create drainage canals, roads, dig well for irrigation, sow multi-species cover crops for the winter
- Set up farm infrastructure: greenhouse, hoop house, office, well, tool room, bathrooms, and seed processing room
- Buy essential farming equipment: tractor and attachments, transport trailer, truck, irrigation sprinklers, and combine harvester







3. Jubilee Justice Farmer Cohort

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Developing the JJ Farmer Program



The JJ farm team undertook three RV-trips to visit all the farmers in the cohort, to provide technical assistance and have in-depth discussions about the rice trial experience.

The three trips were:

- November 2020: planning of the 2021 season
- May 2021: visit farmers at planting time
- August 2021: visit farmers right before harvesting

Additional visits by some of the farm team members were organized during the cropping season as needed.

Location of Jubilee Justice Farmer Cohort, 2021/2022

In 2021, the Jubilee Justice cohort expanded from **two** Mississippi farmers in 2020, to a total of **eight** farmers in Louisiana, Mississippi, Georgia and South Carolina. Demand increased by word-of-mouth and the JJ farm team visited new farmer candidates and identified at least one new farmer in LA, two farmers in GA and two farmers in SC to join the JJ farmer cohort in 2022.



Red Markers: Farmer cohort 2021

Blue Markers: New farmers joining in 2022

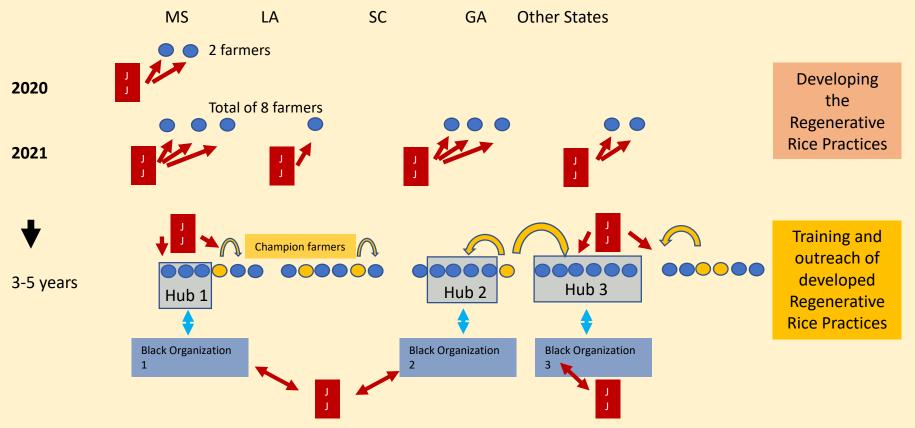
Yellow Marker: JJ headquarters in Alexandria, LA

Orange Marker: New Communities in Albany, GA, part of 2021 cohort

and to become JJ Eastern Outreach Hub in 2022

The JJ's scaling approach to collaborate with farmers

The Jubilee Justice (JJ) farmer approach started out by providing technical assistance to individual farmers. As we are in the early stages of developing the regenerative SRI rice production practices, this approach is necessary. It includes in-depth technical discussions and observations. We will continue using this approach in 2022. But as JJ becomes more confident what works well, develops best practices and training modules, JJ will transition to training NGOs, farmer and outreach organizations, who can then connect with and train farmers. With that approach, we further strengthen human capacity across a wide range of organizations, improve collaborations and can reach many more farmers (see figure below).



Farmer experiences 2021 (1)



First planting: Rice suffered from drought and disease.



Second planting: Rice developed very well with disease monitoring and watering at critical development stages of the rice crop.



Farmer experiences 2021 (2)







Farmer experiences 2021 (5)

This year we agreed with New Communities in Albany, GA to become the Eastern Jubilee Justice Hub (GA and SC) for testing, rice processing, and outreach via Southwest Georgia Project

- Outreach Coordinator and Rice Trial Co-manager Zel Hutchinson
- Jubilee Justice Cooperative Consultant and Rice Trial Co-manager- Collie Graddick
- Location for Jubilee Justice's eastern rice mill



Rice variety trials 2020

- Tested 10 varieties in landscape fabric
- Faced seedling establishment difficulties because of weeds and heat associated with late planting.
- Found five best varieties and will test next year in cover crop mulch and fabric

Farmer experiences 2021 (6)

Main Challenges: Weeds and Diseases

- This year's challenges stressed the importance and need for soil health
- Jubilee Justice is committed to promoting and preserving the biology in our soils to combat the challenges of fungal disease, weed pressure and drought while increasing the nutrition in our crops and communities.





Visiting new farmers

The Jubilee Justice team visited farmers in LA, GA and SC interested in joining the JJ cohort in 2022. We plan to especially increase our reach in the project's home state of Louisiana.





4. The Jubilee Justice Rice Mill





5. Partnerships and Collaborations

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Potlikker Capital and Jubilee Justice

- Our sister organization, Potlikker Capital, is a farm community governed charitable integrated capital fund created to holistically serve BIPOC farmers in America who operate at the intersection of racial and climate justice.
- We work side-by-side to offer a larger menu of resources to black farmers in the Southeast

Partnerships developed:

- <u>New Communities</u> was originally founded as a collective farm for black farmers and is recognized as the first community land trust in the United States.
 - New communities has agreed to be the Eastern headquarters for Jubilee Justice, housing our second rice mill, conducting research trials, and organizing outreach events in nearby farmers
- Mad Agriculture is a 501 (c)(3) that provides farm and business planning, financing, and access to crop markets to farmers and farmer groups across the country
 - We have partnered with Mag Agriculture to increase our capacity to work with farmers and offer more assistance in the economic planning of their farming businesses.
- <u>National Black Food and Justice Alliance</u> (NBFJA) is a coalition of Black-led organizations aimed at developing Black leadership, supporting Black communities, organizing for Black self-determination, and building institutions for Black food sovereignty & liberation.

Outreach, Field days and Networking

Outreach:

- April 27: Konda Mason and Mark Watson presented JJ and PC to the representatives of the Black Caucus of the South Carolina State Legislators.
- Some legislators connected us to farmers in SC, who we've included in our farmer cohort.

Field Days at Inglewood:

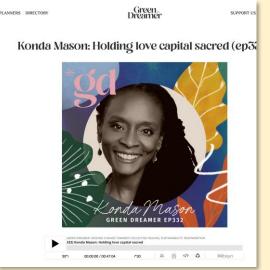
- Still facing COVID
 restrictions, a few field
 days and community events
 were organized where JJ's
 research experiments at
 Inglewood were shared
 with the community.
 Among the visitors were:
 - Aug 25: Journalist to create a feature in NRCS newsletter
 - Sept 9: Campti Field of Dreams; Back to Your Roots Conference 2021
 - Oct 4-8: New Community collaborators visit

Networking, Meetings and Visits

- During our field trips to farmers, we also reached out to champion farmers, research institutions, NGOs and private businesses to connect and network. In 2021, we visited (among others)
 - Rodale Institute
 Southeast Organic Center
 in Chatahoochee Hills, GA
 - USDA Soil Dynamics Lab in Auburn, AL
 - Nazirahk Amen and Purple Mountain Organics in Tacoma Park, MD
 - Heinz Thomet and Next Step Produce in Newburg, MD

Jubilee Justice in the Press







Black-Led Investing Funds and Firms Look to Bridge Racial Wealth Gap

About B Corps

Innovative Financial Leaders Are
Expanding Access to Capital, Building
Generational Wealth, and Helping
Growers Convert to Regenerative
Practices

Oct 28, 2021





The JJ School

- Furthering Education for the Farm Team: In November 2021, the entire JJ farm team has started to take the one-year-long Dr Elaine's Soil Food Web course. We will use what we learn to pass on to our farmers, through technical assistance, trainings and by creating technical manuals.
- The JJ Farm Manager participated in the Organic Seed Alliance Seed Production Course, and in the 2021 Louisiana Food Fellowship to improve service to our farmers.
- **Technical Manuals:** in 2022, the JJ farm team will create technical rice manuals to be shared with our farmers.
- Trainings will be organized in 2022 at JJ Farm HQ and in farmers' fields about best practices to cultivate regenerative SRI rice.



Get in touch with us: Info@jubileejustice.org

Outlook for 2022

- Install rice mill in renovated building and get mill running
- Sell our first rice through direct marketing and Lotus Foods
- Experiment with new rice varieties, crops, and cropping systems questions on the new five-acre farm in Alexandria, LA
- Expand farmer cohort and provide close technical assistance
 - Make technical manuals and training modules available to cohort farmers
 - Organize trainings and exchange visits
 - Connect farmers with new partners
- Learn new soil regenerating and biological techniques with the completion of the soil-food-web course and create a training module for cohort farmers
- Create new revenue streams: seed and seedling production for rice and other crops, composting business
- Provide equipment support to farmers in planting and harvesting rice and other JJ rotation crops
- Connect to new farmer-supporting organizations, and establish partnerships to develop an improved outreach strategy
- Collaborate with Mad Agriculture to pilot a design with three farmers to transition from conventional to regenerative farming