

# AGRIBUDDY - CONNECTING THE NEXT BILLION

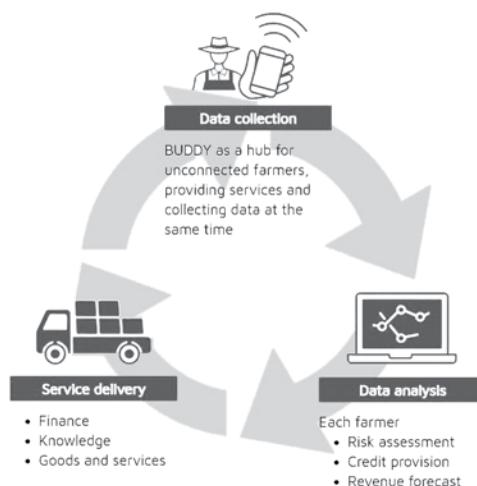
## Case Study of the Red Chilli Project, Khammam Telangana

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### Introduction

AGRIBUDDY aims to make agriculture a sustainable business for farmers. The objective is to transform agriculture and make it remunerative for every stakeholder in the agricultural industry globally.

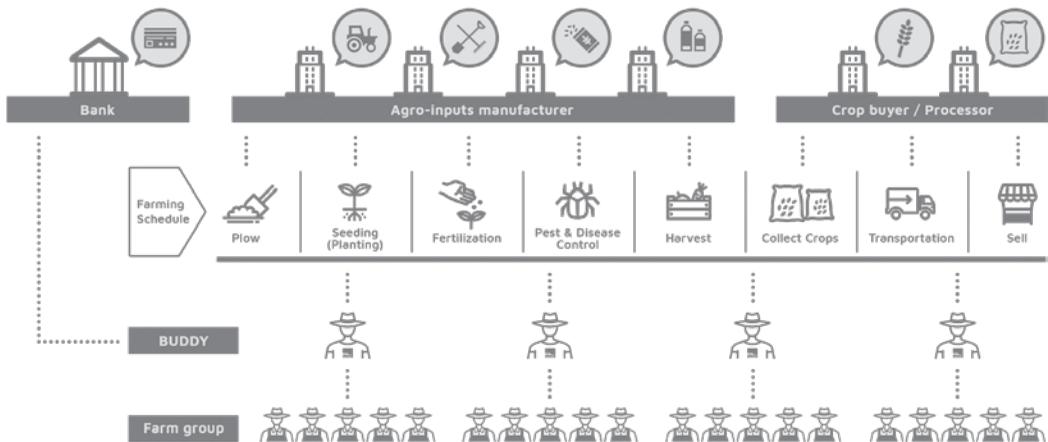
The AGRIBUDDY platform helps farmers in getting the highest productivity and efficiency from their farms. The platform aims to “connect the next billion” to educate and sustain the next generation of farmers. The platform provides a variety of knowledge and tools, from information on crop care to market intelligence and updates on the latest agriculture technologies. Additionally, AGRIBUDDY also provides its own credit scoring function to improve access to finance for purchasing agricultural resources.



Picture 1: The AGRIBUDDY model

AGRIBUDDY partners with farmers, service providers and agri input suppliers to provide complete extension services required by farmers for their crop production. The AGRIBUDDY team works closely with farmers on providing quality services and coordinates with other players in the value chain for providing crop advisory, agri inputs and market access for fetching a fair price for farmer’s produce. The BUDDY (rural entrepreneurs) integrates communities of farmers by collecting and recording individual farmer data such as land area, crop data, yields, infrastructure availability, weather patterns etc., and facilitates good and services to farmers, by being a conduit for expert inputs such as latest in agronomy, soil testing, fertilizers, seeds, best time for planting, market information, harvest and market connects.

The AGRIBUDDY platform also enables aggregation of agri commodity outputs for domestic and export bulk buyers. The platform can track availability in real time, execute tighter quality control and coordinate logistics for higher cost-efficiency across disparate regions and multiple locations. AGRIBUDDY also functions as a monitoring platform for contract farming companies.



Picture 2: The AGRIBUDDY technology platform

## AGRIBUDDY in India

AGRIBUDDY was founded by Kengo Kitaura and is now managed by a diverse and skilled team from Japan, Cambodia, India, Hong Kong and Vietnam. Agribuddy India Pvt Limited is registered in Gurgaon, Haryana and has started operations in the state of Andhra Pradesh and Telangana. Its India business is led by Raj Kancham and Naho Shigeta. AGRIBUDDY has offices in Guntur, Andhra Pradesh, Bangalore, Karnataka and Gurgaon, Haryana. Primary operations are run out of Bangalore and Guntur offices.

## Nature of Problem

Market research conducted by AGRIBUDDY revealed the following issues and challenges confronted by farmers:

- Non-availability of credit from formal financial institutions was a major issue that the farmers were facing. As a result, they were forced to borrow money from money lenders and middle men at a very high rate of interest going upto 24-36 Percent per annum.
- Middlemen were hedging crops at very low prices for providing unsecured loans to farmers
- Farmers depended on local input providers for agronomy advice. The input providers had vested interest in offloading their inventory. As a result, farmers did not get desired results from the inputs that they were purchasing
- Not following modern agricultural practices increased the cost of cultivation for farmers
- Over usage of agricultural inputs led to unhealthy low grade produce
- Farmers did not receive timely and sound agronomic recommendations because of weak extension systems

- Farmers were not getting the correct price for the produce and were paying higher commission charges to middle men
- The farmers did not receive timely payment for their crops. At times the buyer did not even return to pay for the farmers's produce causing huge losses to farmers.

The Red Chilli Project was designed to address the above problems and bring in transparency in the entire farming ecosystem.

## The Red Chilli Project

The AGRIBUDDY Red Chilli project is a transformational project, that will for the first time bring a transparent, end to end value chain to small and marginal framers encompassing a range of goods and services such as soil testing, provision of agri inputs, quality agronomy advice, on-ground monitoring of crops, financial assistance, and market access for better price for the produce.

Selection of farmers was based on their progressiveness, willingness to adopt scientific package of practices, good credit history and openness to take instructions from AGRIBUDDY on ground representatives.

This project is located in Khammam district of Telangana state.

| Acres Under Cultivation | Number of Farmers | Average Farm Size (in acres) | Number of Villages | Loan Amount required (INR) |
|-------------------------|-------------------|------------------------------|--------------------|----------------------------|
| 649                     | 292               | 2.22                         | 52                 | 44,046,649                 |

## Project Finance

Partnering with Samunnati Financial Intermediation & Services Pvt. Ltd. as the crop loan provider, AGRIBUDDY processed loan applications for 292 farmers using its platform and physical collection of documents for fulfilling KYC requirements of the financial institution as per RBI guidelines. Since AGRIBUDDY had automation in place, they were able to complete the loan application process within 2 weeks for all farmers across 52 villages. Samunnati sanctioned a collective crop loan of INR 5 Crores for this group of farmers.

## Crop Insurance

Partnering with Weather Risk Management Services Private Limited (WRMS), AGRIBUDDY enabled farm level crop insurance for farmers, covering pest attack and weather risks. This insurance was underwritten by HDFC ERGO.

Since AGRIBUDDY had the loan application automation in place, insurance forms were pre-populated, and the farmers were only required to sign on the form. This reduced the time required for filling of farmer details into insurance forms.

WRMS installed weather stations in every project village, giving near real time weather updates of the farms, which is helpful in analytics and to substantiate insurance claims.

The maintenance of weather stations is assigned to BUDDYs which creates an income source for them.

## Agro Inputs Supply Chain

Partnering with BigHaat.com, an online platform, AGRIBUDDY has negotiated and aggregated input supplies for on time delivery, aligned with the planting schedule. BigHaat being an online platform, it becomes easy for AGRIBUDDY to put in farmer orders and plan supplies online in a timely fashion.

This arrangement largely reduces time, human errors and supports ease of communication. BigHaat ensures the agri inputs are delivered in each village and collected by the farmers on time. All records are maintained both digitally and physically with the farmers in a farm book which records input supplied and applied in the fields.

Partnering with Professor Jayashankar, Telangana State Agricultural University and Red Chilli Research station, Khammam, AGRIBUDDY with their multi-year domain experience, have developed a detailed package of practice required to grow Red Chilli in a scientific way. The field staff of AGRIBUDDY have been trained on this package of practice, and further conduct farmer training in each village to ensure the package of practices are followed as per the guidelines provided.

AGRIBUDDY leverage a combination of tech and non-tech methods to measure progress. To start with, they have issued farm book for all the farmers enrolled under this project. Their field staff captures data of input delivery and application during the previous crop cycle. For farmers “seeing is believing.” So data in the farm book gives them confidence while AGRIBUDDY staff captures the same on the mobile app for backend analytics and processing.

The AGRIBUDDY team along with the BUDDYS monitor the field by meeting the farmers and provide them with agronomy advice on a weekly basis. Apart from on-ground agronomy support, AGRIBUDDY also send in automated planting schedule, tips, alerts and symptoms to look out for via SMS in vernacular language.

Any emergency situation is quickly addressed using platforms like WhatsApp and Telegram where the farmer or AGRIBUDDY staff can record videos and send them to AGRIBUDDY agronomy team for expert advice. This real time communication using video and audio has helped arrest pest attacks at village level.

Tracking using both the ground staff and technology enabled systems has got the farmers efficiency in resource usage and protected the crops from overuse of pesticides and fertilizers.

## Market Connect

AGRIBUDDY has signed a contract with farmers to buy back their crops from the farms managed using AGRIBUDDY's package of practice. When the harvest is ready, AGRIBUDDY sends the day's market price over SMS to member farmers. If any farmer agrees to sell their produce, AGRIBUDDY collects the crop, grades and sorts them at the farm itself and makes digital payment into his bank account that was recorded during the registration process.

The farmer stands to gain by selling his produce to AGRIBUDDY as they do not charge any commission, which is paid to middle men (typically 5 percent). AGRIBUDDY deducts the loan amount and repays the Crop Loan provider the outstanding, paying the balance to farmer instantly at the farm gate using UPI/ IMPS payment methods.