

AGRICULTURE & INDUSTRY SURVEY

India's Leading Business Magazine for Agriculture



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SourceTrace Systems

Specializes in agriculture software mobile applications for budding economies

SourceTrace Systems facilitates agriculture value chain by developing mobile-based software solutions connecting the farm-lands to market sales. It designs solutions for the organizations like corporate, cooperatives, NGOs, and government agencies who are working with small and marginal farmers located in the remote or low bandwidth areas.



The real time information provided by SourceTrace Systems to its clients allows them to increase operational efficiencies, reduce costs and help their respective farmer network to increase their production.

The company primarily focuses on sustainable agriculture and empowerment of smallholder farmers. Head Quartered at Cambridge, Massachusetts, The USA with other offices at India, Bangladesh, Costa Rica, Uganda, Nigeria, Kenya & Tanzania.

The company offers solutions in four areas namely agriculture, aquaculture, forestry, and plantation. All these solutions are researched in detail and designed to incorporate every minute aspect of farming. Every factor is defined meticulously. These solutions are-

- SourceTrace ESE™ Agri solution
- SourceTrace ESE™ Aqua solution
- SourceTrace ESE™ Plantation solution
- SourceTrace ESE™ Forestry
- SourceTrace ESE™ Agri solution tracks

the flow of goods from the source (farmer) to the central processing facilities even in the world's most remote areas. The field staff and the extension workers of the organization use the mobile applications to capture the data and transactions at the touch points of the farmers. All the applications of this solution perform seamlessly, whether there is a connectivity or not. ESE Agri has number of applications such as

- Farmer, Farm, Crop Enrollment
- Input Distribution
- Procurement and Payment Processing
- ICS (Internal Control System) for Certification
- Crop Monitoring & Advisory Services
- Monitoring & Evaluation
- Training
- Traceability

Data collected on mobile devices can instantly feed sophisticated, powerful flow-of-goods analytics that let the company respond to the market instantly.

With the SourceTrace ESE™ Agri-Business solution, organizations achieve:

- Global visibility of operations and supply chain
- Greater transparency
- Ensure source traceability
- Real-time business intelligence
- Reduced operational costs
- Increased internal controls
- Better resource management
- Increased capacity to grow
- Multilingual functionality

SourceTrace ESE™ Aqua solution focuses on capturing the traceability from the hatcheries to ponds to processor and exporter. The full chain of custody can be traced back and the complete aquaculture practices in the ponds can be recorded including the feed, water quality, sample growth, any pest information etc providing full visibility and transparency of aquaculture value chain. Companies like WorldFish in Bangladesh and US-based National Fish and Seafood (NFS) are using this solution. SourceTrace management is very optimistic that some of the new regula-

tions in US and Europe about traceability of seafood are going to drive demand for aquaculture traceability solutions.

In India, SourceTrace Systems is working with several small FPOs to large corporations and government agencies. Overall it has more than 35 major customers, some of the notable ones are Government of Telangana, Government of Andhra Pradesh, NABCONS, ADITI Certifications, C & A Foundation, TamilNadu Newspaper and Print, TamilNadu Forest Department, BASIX, ChetnaOrganic, Sagi Seeds, InDEV, Indo-Spanish, Go4Fresh, PCPCL, APMAS, National Fish and Seafood etc.

SourceTrace Systems have been instrumental in improving transparency in the agriculture value chain and traceability in the implementation of improved food safety. It helps the nation at large to have better crop management, eliminate paper-based administration systems that are time-consuming and prone to mistakes.

Above all the solutions have been a boon to small and marginal farmers as it provides access to global market with better market linkages and most important protection from financial leakages. They are able to receive timely guidance on crop monitoring that ensures high production and prevention from losing the harvest.

Dr. Venkat Maroju, CEO, SourceTrace Systems interacts with us sharing the details about the organization's focus on agriculture, better prospects for the farmer and future plans.



In Conversation with Mr. Venkat Maroju, CEO SourceTrace Systems

We enable large organizations to work directly with farmers using the mobile applications and empower them to enhance growth of national economy

It was yourself who suggested, the lead investor, Gray Ghost Ventures to shift SourceTrace Systems focus on agriculture. Why you suggested agriculture?

The initial challenge for us was to transform the organization that was working on several diversified sectors into consolidation. Next, it was to bring focus to agriculture and allied sectors which play a vital role in the world economics. This sector has more than 70% of small landholder farmers who need to adopt technology for sustainability and empowerment. These farmers are responsible for 70% of the world food production but are poor and the majority of them are living near the margins of society.

We focused our goal and objective to reach a large number of small landholder farmers spread across the globe and provide mobile application and solutions to the organizations who are associated with them. SourceTrace Systems considers them as a vital part of addressing the issues of global food safety and security and achieve sustainable agriculture.

Producing enough food for growing population while ensuring the ethical production in order to minimize the environmental impact on the planet and equitable treatment of farmers is one of the major challenges of our generation. SourceTrace Systems by bringing the latest technologies to the first mile of agriculture not only considers this as a great opportunity for social impact but also a large market opportunity for building a viable business.

What makes SourceTrace Systems unique and different from its competitors?

SourceTrace has been a pioneer in developing mobile applications which operate in remote parts of the developing countries. We started developing transaction-capable mobile applications even before the advent of smartphones. So we have deep expertise in developing mobile applications and our platform

eServicesEverywhere has been developed over the years with a lot of investment. It offers us a very competitive advantage to develop applications very rapidly. Secondly, we are the only company with true global presence in USA, Asia, Africa and Central and South America. Thirdly, we have some of the who's who of the social venture world as our investors; Gray Matters Capital, Soros Economic Development Fund (SEDF), Serious Change, The Schmidt Family Foundation and Sorenson Impact Fund.

Are your solutions customized as per the client requirements?

Our application development services provide the individual customer with tailor-made, business-essential innovations that help them to extract the full value of their investment by enhancing competitive differentiation in their operation through the adoption of SAS based mobile digital application. We have developed all the modules required in the value chain, farm to fork. SourceTrace application is ready to use model and can be deployed anytime anywhere across the globe.

We are open to any specific requirement and customization based on the need of the industry and requirement of business, but as we have already covered most of the modules hence most of the customer requirement is readily fulfilled. We have understood agriculture and their value chain functionality better than anyone in the domain.

Company claims that it enables grass root level farmers to participate in global commerce. How it happens?



Larger agribusinesses and government agencies traditionally depended on the middlemen to do the bulk procurement. It was difficult for larger organizations to operate and have the connectivity with smallholder farmers directly. As a result, the middlemen profited unreasonably at the cost of the smallholder farmers.

SourceTrace solutions enable such organizations to directly work with smallholder farmers using the mobile applications which will work with connectivity or without connectivity even in remote areas where most of the smallholder farmers live. Digitization of farmer/farm/crop profiles is an important to manage a large number of scattered smallholders farmers in remote locations. The field-level agricultural transaction is easily captured and transmitted to the server, for faster decision making and visibility of the operation. In addition, for export oriented commodities or certified produce, it is important to document the good agricultural practices of the individual smallholder farmers. SourceTrace certification platform and farmer/farm/crop profile and traceability applications play an important role in documenting the agricultural practices at the farmer level and keep track of the entire value chain processes.

Do you foresee linking Indian farmers with foreign buyers too and vice versa? How?

We foresee the e-commerce based linkages already many organization through portal based model are adopting these technologies, but active participation from all the stakeholders is needed to scale it up. We are also in talks with a couple of government sectors to roll out these platforms in horticulture, organic and aquaculture. We have the technical know-

how and we can deploy it faster. Market linkages are one of the key areas for small landholder farmers' empowerment and access to global buyers.

SourceTrace Systems is working in different countries. What are the major differences you observe in Indian agriculture and farmers when compared with other countries?

It is interesting to note that there are more or less similar challenges for smallholder farmers throughout the world and solutions also are not that different. Compared to African farmers, India agriculture is doing better in terms of government support and private sector involvement. However, Latin American farmers are more literate and are using the modern technologies and methods.

What are the problems and challenges faced?

"Applying information technologies at the grass roots level of agriculture in developing economies" is still a novel area and getting the customers to understand the value and pay for the service has been a significant challenge in the beginning. However, as we build a good customer base and having success stories to share is definitely helping the acceleration of market penetration.

What are your future plans?

We consider the India / South Asia, Africa and Central and South America as the three important regions holding almost 80% of the smallholder farmers in the world. We do have a strong presence in India and Bangladesh and we also have a physical presence in Costa Rica. We currently do not have our resources in Africa, but fortunately, we have the largest farmer base in Africa. We work through a number of business partners in Africa and it is working out well so far. By 2020, our goal is to reach 10 million smallholder farmers in 50+ countries and become the highly visible brand name for providing software solutions to agriculture value chain and smallholder farmers. And we want to expand our services into other allied sectors such as animal husbandry, and incorporating latest technologies like GeoSpatial in the application.

Our Correspondent

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