### The graphs refer to 9 tomato fearmers in AP

Planting and tray installation: Dec 2019-Feb 2020

Harvest: 20/02/2020 - 03/06/2020 ### Introduction The NITSAN lab works with local partners in developing countries to introduce, adapt and test improved cultivation technologies (mostly based on Israeli tech) for greater yields and income for smallholder farmers. Special business models are then developed to enable those technologies that prove themselves as profitable to disseminate among farmers. In 2017, Tata Trusts and the Nitsan Lab joined forces to increase smallholder farmers’ net income in the state of Andhra Pradesh. One of the technologies identified by the partners to have a potential to assist vegetable growers in the area was developed by the Israeli company Tal-Ya. The Technology ABOUT TALYA TRAYS

### The Process

In 2018, Tal-Ya was among the first Israeli companies to be selected to be piloted in the field. Prior to this pilot, and despite its long-standing desire to enter the Indian market, Tal-Ya was never able to introduce its technology and test in rural India. The approach of the NITSAN lab is to initially test potential technologies at a small scale and then gradually scale up depending on the performance of the technology in field trials. A special emphasis is placed on conducting field trials in actual farms and by actual smallholder farmers, rather than in a controlled experimental station. It is only in this way that the real performance of the technology, when operated by local farmers, can be verified. Once a technology has proven itself at a scale sufficient to draw robust statistical conclusions, and has been demonstrated to local farmers, a specialised business model is developed to allow the technology to be purchased by local farmers. Even though Tal-Ya was originally designed for fruit tree cultivation, it was tested for both fruit trees and various types of vegetables in Andhra Pradesh. By today, Tal-Ya trays have gone through three rounds of field trials for various crops. A business model was developed for dissemination, but all trials were interrupted by the Covid-19 pandemic and the severe lockdown which paralysed agriculture in rural India. Testing and scaling up will be resumed when conditions return to normalcy. It is important to mention that the scale and pace of field testing is ultimately determined by the local partner. In this case, Tata Trusts chose a cautious and slow pace of progress. Phase I (2018-19) - Since September 2018, close to 1,000 Tal-Ya trays have been installed over 9 smallholder farms in Andhra Pradesh and are currently being piloted with trees (mango, custard apple, sweet lime, apple ber, moringa) and vegetables (tomatoes). Final results for the tree experiments are expected by 2020/21.

### Tomato Pilot

Trees Pilot

Phase II 2019-20

Bittergourd

Tomato

Melon

Business Model Description

image: 