## SBiofeed

## THE CONDITIONS THAT ALLOW LOW-RISK INVESTMENT IN AGRICULTURE


"Investors will refrain from investing not because of low profitability, but due to high risk."
*in my articles, I address general phenomena. Mention of a country/continent is for illustration purposes only.

## INVESTORS' WAY OF THINKING

Investors look at investing opportunities as a two-dimension equation: Risk versus Profit opportunity, within a specific Time frame.

Under this simple equation, 'high risk' will drive investors away, while 'high opportunity' will attract them.

Currently, the risk of investing in emerging markets is high, while the value proposition is low. Hence, business-oriented investors keep away from those markets.

But, is there a way to change this situation?

Is there a way to turn the emerging markets into much more attractive for investors ready to invest in the agri-sector?

Do we have or can we design a model that offers, in a predictable manner, the profitability, sustainability, and worth of investments in agriculture in a way that investors would look forward to investing in the emerging markets' agriculture?

## WHY IS THERE A NEED FOR INVESTMENTS?

Coming from Israel, I am used to farmers having orchards, e.g., mango, with yields in the range of 40 to 60 tons per hectare, most of which at Export Quality.

Then I'm arriving in Asia, and Africa, where the typical mango yield is only $\mathbf{3}$ to 15 tons per hectare. Furthermore, export is often BAN due to bio-security issues, that is, fruit flies.

The mango industry is not unique; it merely represents the massive gap across the agro-industry, between emerging and more developed ones.


Green Valley

One should wonder if it is possible to bridge that gap, and if so, then how?
I believe it is possible, but we will need new tools, creativity, and mainly to change our set of mind for that to happen.

One thing I noticed in my travels in emerging economies the agro-industry value chain is broken, and there are many missing parts or parts that require considerable up-grade.

That observation made me create the Green Valley operational model concept, which is made to bring a COMPLETE solution to the entire value chain.

In light of that vision, we developed the necessary 'tools' to help expedite the desired change.

We decided to start the change with the huge, yet unexploited, mango industry.
First, we focused on the most fundamental challenge; the inability to manage fruit flies properly.

The fruit fly problem is fundamental to turning the mango industry in Africa and Asia into a profitable one and is second to none in crippling its exportability.

Accordingly, our first Green Valley mission was to provide a solution to the problem of fruit flies. The result of that is the novel Fruit Fly Certified Trade Zone (FFCTZ) protocol.

The FFCTZ protocol is based on unique professional expertise in fruit fly ecology, combined with applying the FreeDome breaking through technological control solution.

Thanks to the FFCTZ protocol and the FreeDome non-spraying solution, at last, it is possible to move the Mango industry from its current NO GO status to the status it deserves for many years; a huge giant and beautiful EXPORT GO.

IMPORTANT NOTE - Everything described below is possible ONLY thanks to Green Valley's ability to efficiently manage fruit flies by applying the FFCTZ protocol.

## A WINDOW OF OPPORTUNITIES FOR INVESTMENT

Thanks to the FFCTZ protocol, fruit fly phytosanitary issues are no longer the main obstacle to export.

But even without the threat of fruit flies, there are still many vulnerabilities in the value chain of mango exports.

Note that investors are not part of the current export value chain. However, investors will be happy to invest in the mango industry when they see that their investment's significant risks have been removed.

Green Valley's task is to pinpoint and cope with those vulnerabilities in the mango export value chain, which we relate to as Risks, and consequently fix or remove them.

Green Valley's way of fixing or removing risks while simultaneously maximizing the value for all value chain participants is by using the best field proven technologies, knowledge, protocols, and services.

Upgrading parts of the value chain, and sometimes rebuilding or even CREATING it (e.g., FFCTZ), involves necessary costs to start, which often value chain partners in the emerging economies lack.

This is kind of a "Catch 22", where the mango industry is not advanced due to lack of investments, and investors will not invest as long as the industry is not advanced.

Unavailable funding may seem like a problem, but I see it as an opportunity to bring onboard investors. For investors, it is a unique opportunity for long term profitable and competitive investment.

Investors will come if we manage to create an investment model for sustainable mutual benefit and growth.

We will know that this model is working well when we see mango growers in emerging economies having yields in the range of 40 to 60 tons per hectare, mostly export quality.

The mango industry, to which I refer herein, should serve as a model to other crops and industries in emerging economies.

Now, let's see what models are available to attract business-oriented investors and how they can become part of the profitable export value chain.

## THE 'PUSH' MODE OF INVESTMENTS

Recently I met government officials from a developing country. They encouraged me to invest in farmers' growing mangoes for the local market.
** You should know that the price of mangoes in the domestic market is tens of percent lower in comparison to the premium export market's price. **

What the government representatives have tried to do is to "push" (inject) investments directly into the farms (farmers).

If succeeding, the government representatives' impact may be the increased production of more of the same product (mangoes).

Those mangoes are aimed to reach the already overloaded low quality and low price domestic markets.

Only 'producing more of the same' may cause the opposite effect and even cause a price drop in the local markets, resulting in an even lower income for the farmers.

Lower farmer's income will worsen the farmer's ability to return the investment and get future investments.

I am sure that the government representatives' motivation is pure, right, and true, but by acting in such a way, they may hasten unwanted results to all parties.

Furthermore, the domestic market's small margins are less appealing for investors expecting much higher and assured ROI.

This example illustrates the current situation in which international organizations, NGOs, and governments are Pushing funding, machinery, field support, etc., to farmers to help them to GROW MORE.

Let's call this model - the Push Model.


The result of the investment Push Model is unpredictable and risky market. Note that farmers prefer to dump excessive produce than to sell it for less than its cost.

Suppose we wish to attract investors into investing in the agro-sector of emerging economies. In that case, we need to ensure that they do it through a suitable economic model to ensure everybody's' success, including that of the investors, farmers, and the national economy.

After many years of extensive applying of the Push Model and pushing through it tens of billions $\$$, it is visible that it is not working and not achieving its purpose.

We can conclude that increasing production is necessary, but it is not sufficient.

For a successful agro-sector, we also need the essential ingredients of -(a) access to high-value markets, and (b) produce at required quality and quantity.

You see, why anyone should invest unless he is confident that there is an explicit demand for that produce when sold at a specific price.


The current Push Model of investing and supporting farmers is, offering low confidence and opportunity to investors.

## MAKING INVESTMENT ATTRACTIVE

The investment Push Model is useful when dealing with hunger, but less so for creating prosperity.

Can we design an investing model for investors looking for prosperity that would assure them of the following prerequisites' demands?

1. A farmer that can grow the target crop.2. A market with a stable or increasing demand for that crop.3. A high market price for that crop, within an expected range.4. A long-term sound investment with tangible ROI.

## Is it possible to assure the above criteria? If so, how can it be done within a frame of a business model?

One way of dealing with that issue is by having farmers growing crops and producing food only after receiving a specific order from a trader.

This concept is already happening with many farmers who grow and commit their produce to specific traders.

Often, the traders will sign an agreement with the farmer and may even transfer part of the payment in advance.

In this regard, the trader acts as a sort of investor. He is pulling the produce from the farmer, and against that future commitment, he is ready to invest and share the farmer's risk.

Since the trader is far better familiar with the market demands, compare to the farmer. Hence, his chances of being wrong about the market demands and not selling at a target price are lower. The outcome is a lower business risk.

The trader's knowledge of the market enables him to reduce his business risk and the risk of farmers cooperating with him.

Let's call this model the - Basic Pull Model, for it answers the fundamental requirements.

An investor using this model will invest only after being confident that the farmer is having a secured demand, i.e., agreement with the trader, for the crop he can grow.

We can learn from this model that organizations, such as the World Bank, NGOs, and government would do better (for the farmers) if they support ....the Traders.

Yes, the export value chain, including the farmer, will benefit more if the trader/exporter would get financial support!

If we support the trader (e.g., subsidizing his loans), he will have a greater ability to prepay farmers for their future produce.


The Basic Pull Model offers investors higher confidence and business opportunity versus the Push model.

An agreement between the farmer and trader before production/season could be tremendous progress and a necessary step in the right direction.

This may look logical and satisfactory, but it is still insufficient to create the BIG change that all involved would like and hope to see.

Why?
Because the investors may say:"I see that there is market demand, but - how can I be sure that:
(A) The farmer would grow precisely what consumers want in terms of - quality, quantity, and at the right time? If the farmer fails to produce according to the market demands, the demands may drop to zero. Alternatively, the farmer may grow according to requests, and yet the market may be overloaded.
(B) The expected price will be attractive enough."

The Basic Pull Model does not deal with those issues, and hence we should look for a more advanced model to bridge those concerns of the investor and the value chain.

## THE SHELF-TO-FARM BUSINESS MODEL

When we think about traceability, health, food supply chain, etc., we tend to think of the Farm-to-Shelf business value chain.

However, for investors, it is the other way around. The money flows from the market downstream to the farmer and the investor.

That is a SHELF-TO-FARM revenue model.
Hence, investors would like to know the market demands and work their way back to the farm to ensure the farmer is growing precisely according to the market demands in terms of time, quality, and quantity.

This issue is critical for successful investment.
Investors will be excited and willing to invest if they can be assured that -
(a) there is an attractive prerequisite market. (b) there is a trader who has access to that market.
(c) there is a farmer capable of growing the required crop.(d) the value chain can deliver on time the right quality and quantity.
(e) there is a professional field to shelf support, to assure standing up to requirements.
(f) there is a target price for the produce.

We can ask; how do we ensure the market, market access, and compliance of the value chain with the market demands, i.e., quality, quantity, and timing? And there is this little thing of assuring the concern of price for the produce.

The investor may say, "I invest in growing this crop, I take the risk, and so I want to get the highest possible ROI for it. Can you assure that?".

## THE FULL PULL MODEL

The Basic Pull model gave answers to many concerns, but our virtual investor left us with more challenges.

But this is the beauty of things; we need to understand what the investor wants.
Then we can design a full business model accordingly, including the required tools and methods, and give a proper answer to each of the concerns:

Challenge 1: Compliance with market demands.
Answer - We ensure compliance with quality, quantity, and timing demands by using experts' support. Hence, we assure that the farmer and the value chain are standing up to all requirements and demands to maximize premium markets' financial potential.

Challenge 2: Getting the best price.
Answer - Targeting premium high-value markets, i.e., export markets.

Let's call this model - Full Pull Model, for it takes care of all issues, from the field to the shelf, that may be a cause for business concern.


The Full Pull model offers the highest opportunity and confidence, thanks to the professional support the investor is financing.

The investor will invest after ensuring that the entire value chain can work in harmony to bring the desired results.

This concept of managing the value chain "to work in harmony to bring the desired results" is called ADI (Agri-Development Investment) model. That model was already presented and explained in a previous article [ $\gg \lll$ ].


The Agri-Development Investment model (ADI) goods and money flow. ADI model is designed for increasing investments for fruit export from less developed countries.

When the Full Pull investment model is working within the ADI model frame, the risk is minimized, and the business opportunity is maximized.

The investor is practically investing in; (1) decreasing his exposure to risks and (2) increasing his business opportunities.

He does so by practically financing top professional support (knowledge, services, technologies, protocols, etc.) along the way from the farm to the shelf.

Thanks to the top professional support the chosen farmer and the value chain receives, including total quality assurance (TQA) along the export value chain, the investor has minimized his risks while simultaneously maximized his opportunities and confidence regarding the results.

## A RECIPE FOR SUCCESSFUL INVESTMENTS

Every day we hear the calls for increased investments in the agro-sector of the emerging economies.

I believe that those calls are left unanswered and will continue to be so until the international and the business community take a more business-oriented approach.

The Full Pull business model approach, presented herein, unlike the two previous business-oriented models, is not extracting value and resources from the countries but entirely, on the contrary, bringing value to the country.

Agro-business is sustainable when applied and conducted correctly.
Hence, every investment allocated to supporting farmers and the export value chain supports the local agro-industry and is turned into the local agro-industry asset.

The Full Pull Model ensures that investments are correctly utilized, and production follows predetermined parameters and market demands.

The Full Pull model can attract many investors and companies to invest in the emerging economies, offering; low risk, relative advantages of emerging economies, and ultimately, more effortless ability to exploit business opportunities.

To fully utilize the Full Pull model, it is necessary to see that all parties across the value chain are aligned and have a model for managing the goods, services, produce, and financials.

Note that the Full Pull model is fully exploited when investments arrive from the organization that is selling to the end buyer, meaning to the consumer.

When this occurs, we can rest assured that there is a buyer of what the farmer is growing.

We can also predict with high certainty that the buyer is motivated to support the farmer, and the entire value chain, to reach his (i.e., the market) required demands.

Now we are left with one question, how do we ensure that the investor doesn't overuse his power, hence making the arrangement short-living?

## GREEN VALLEY APPROACH ENSURES THE COLLECTIVE INTEREST

To make sure investments will be sustainable and keep flowing for long periods, we need to convert the Full Pull model into a practical implementation model designed to do that job.

The ADI model provides the framework within the Full Pull model that can successfully be applied and flourish.

To simplify activities, the Green Valley concept already includes the ADI and the Full Pull investing models, along with complimentary breaking through novel tools and technologies (e.g., FreeDome).

Point of view of investors on the various investing models and combinations.

HIGH RISK

| Investor's concern | Push Model (Current) | Basic Pull Model | Full Pull <br> Model | Full Pull + ADI |
| :---: | :---: | :---: | :---: | :---: |
| Abilities of the farmer | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |
| Market demand |  | $\checkmark$ | $\checkmark$ | $V$ |
| The farmer is able to comply with demands |  |  | $\checkmark$ | $V$ |
| The best price per kg. |  |  | $\checkmark$ | $\checkmark$ |
| Qualifying farmers and value chain for investment (ADI) |  |  |  | $V$ |
| A model for investment (ADI) |  |  |  |  |
| Management and coordinate the operation (ADI) |  |  |  | $V$ |
| Professional field team (ADI) |  |  |  | $V$ |

Green Valley is specially designed and made to enhance the agro-industry in emerging markets.

Those, through the aggregation of various means required to pull that immense task, including but not limited to, technologies, knowledge, proper business relations, financials, and services.

Green Valley is made as a copy-paste format that can easily be tuned-adopted and applied to various countries, environments, crops, demands, and requirements.

Green Valley offers investors of all types, including NGOs, countries, investment banks, and private investors, a path for a long-term safe and trusted way to invest in the most promising and profitable agri-food business in emerging markets.

If you would like to participate by investing, exporting, etc., within the mango export value chain to enhance the agro-industry of Africa and other emerging markets, please contact me to consider your opportunities.

My contact details: nisraely@biofeed.co.il or text +972-5423425 (WhatsApp).
Let's talk and see how we can make one plus one much more than two and create a win-win agri-business state.

If you find this article interesting, share it with someone who should see it and benefit from it!

For more details on Green Valley and to sign up for the weekly email - press here.

For a greener world
Free of sprays
Full of joy

See you soon,
Nimrod

## P.S.

Recently I started a new video series where I share the story of how I got to work in Africa (as well as other places). A new chapter is posted almost every day, so make sure to Subscribe to get early alerts. Here is a link in case you find it interesting [ $\gg \lll]$.

## P.P.S.

Note, I plan a trip to Africa, Senegal in the next few weeks. Due to the current state, the date is not yet final, so keep following. However, this will be an excellent opportunity to meet. Send me an email with your request.

## P.P.P.S.

COVID-19 changes people's eating habits and raises awareness of health, chemical usage, and quarantine pests. Green Valley is here to support your effort to overcome those challenges and take advantage of the new and promising open opportunities for those who seize the moment and wish to utilize the situation to improve their future [ $\gg \lll$ ].

## P.P.P.P.S.

Green Valley customized Package concept is composed of various elements;
Technology, Protocol, Methodologies, Models, and Qualified Support Services. [ $\gg \lll]$
The key elements of Green Valley are:

1) FreeDome - the core technology for fruit fly control, which enables export quality. It is used as part of the FFCTZ (see below).
2) Fruit Fly Certified Trade Zone (FFCTZ) is a protocol and action model to enable regulators, exporters, importers, and farmers to confirm with premium markets export requirements.
3) Green Valley National Export Project - this protocol is based on an Israeli model. It is designed for governments interested in adapting their country's agriculture to the 21 st Century.
4) Green Valley Fruits - designated fruit certification label of quality assurance.

## P.P.P.P.P.S.

Who is qualified to use the FFCTZ?

It can be a proper local partner with a particular focus on mangoes, e.g., fruit growers' organizations, fruit traders, exporters/importers, governments, businesspersons, food chains, etc.

## IMPORTANT NOTE!

Our investment in each project is enormous. Thus, we must carefully select the most likely projects to bring about the desired results for all involved.

## Change Begins With A Decision That The Existing Reality Is A Choice And Not A Decree Of Fate

