



ISN'T THIS THE MOST IMPORTANT EVENT OF THE YEAR?

“The more people you impact positively, the more blessed you are.”

STOP FOR A MOMENT; answer yourself these questions before you continue:

Is it possible to double food production within a year?

Is it possible to double agricultural exports within a year?

Is it possible to increase agricultural output without using expensive and toxic sprays and chemicals?

Can farmers in emerging economies move from poverty to prosperity within a year?

BREAKTHROUGH TECHNOLOGICAL INNOVATION IS THE BASIS FOR BUSINESS INNOVATION

Sometimes some events change everything you knew until that moment. Such innovation will redefine a field of activity with all related, thus modifying and changing it for good.

Any organization is lucky if it creates or is associated with such an event once throughout its lifetime.

Biofeed is very lucky, and I feel fortunate to lead it during these exciting times, for it is responsible for two such "game-changing" events, and now to a third one.

TECHNOLOGICAL BREAKTHROUGH -

In 2010, Biofeed was introduced to the world with the *Slow Fluid Release* (SFR) technology.

In 2017, the company introduced even more advanced technology, the *Gravity Controlled Fluid Release* (GCFR).

For the first time, farmers could have crop protection solutions for fruit flies of BETTER quality than sprays, thus making them redundant. This brought a significant CHANGE and began a new era.

KNOW-HOW BREAKTHROUGH -

In 2017, as part of the *Grand Challenges Israel* program, Biofeed presented how in a short time, i.e., one year instead of 20, and at a fraction of the "normal" minimum of \$ 300 million budget for developing a new crop protection solution, it can generate far better non-spraying, eco-friendly solutions. Thus began a new era, where highly effective, eco-friendly, and quality crop protection solutions are available even for the poorest countries and farmers.



“A new (N.I., business) model is often needed, however, to leverage a new technology (as in Apple’s case); is generally required when the opportunity addresses an entirely new group of customers...” ([Johnson M. W. et al., 2008](#))

THE GROUNDBREAKING RESULTS OF THE INNOVATIVE *GREEN VALLEY* BUSINESS MODEL

The UN SDG #1 is – Poverty.

African and emerging markets farmers have been waiting for too long for a breakthrough that would pull them out of poverty.

The World Bank and experts predicted that shifting farmers from poverty to prosperity would take decades, maybe centuries.

However, Biofeed’s novel technology and know-how, wrapped in the *Green Valley* disruptive business model, is about to change this for the benefit of millions of farmers in emerging economies.

BUSINESS MODEL BREAKTHROUGH -

In 2021, the *Green Valley* business model, including its *Fruit Fly Certified Trade Zone* (FFCTZ) protocol, was applied to over 2,500 hectares of smallholders’ mango orchards in Senegal. This was done as part of a large-scale field pilot.

The result of this pilot is about to shake the foundations of our understanding of the root causes of poverty and the relative part that technology, know-how, funds, and business models have in transferring from poverty to prosperity.

Allow me to begin with facts and data.

On Wednesday, December 8, I received a short WhatsApp message from Dr. Papa Djibril FAYE, *Green Valley Senegal's* manager -

"A meeting of mango stakeholders was held at the Radisson Blu Hotel (Dakar, Senegal) yesterday (7/12/2022).

It was reported that mango exports have almost doubled from 14,400 tons in 2020 to 24,000 tons in 2021 (10,000 more), with 11,000 tons to 19,000 tons of mangoes exported to the EU, respectively.

At the same time, the number of infested mangos intercepted in Europe dropped by more than 50%.

It is estimated that 63% of the additional volume exported (8,000 T) comes from the Green Valley project orchards identified in the three production zones of Senegal on only 1,000 hectares out of the 41,000 hectares in Senegal. "

I read it and have to say that I couldn't imagine how fast *Green Valley's* fruit fly control protocol will change the mango industry of a country and a leading one, too.

In short, Senegal almost doubled its mango exports within one season while reducing its fruit fly interception by over 50% and with the bulk of the addition coming from orchards under the *Green Valley* program. Furthermore, mangos sourced from *Green Valley* protocol were grown with zero sprays or application into the environment! Thus, began a new era.

For a good reason, *Green Valley* is short for the "*Green Valley National Export Project.*"

Now STOP (AGAIN) and ask yourself –

How much can Senegal increase its mango exports when the *Green Valley* venture expands to additional territories?

What would happen to other countries that would adopt the *Green Valley concept and methods*?

“I think historically, where we, venture capitalists, fail, is when we backed technology. Where we succeed is when we backed new business models ”.

Bob Higgins, the co-founder and managing partner of
Highland Capital Partners

GREEN VALLEY IMPACT ON SMALLHOLDERS

But just a moment, you probably said to yourself, “*The country has increased the mango exports, but did smallholders enjoy any of the newly created abundances?*”

To this, we can say that the representatives of the smallholders shared their views and insights on the *Green Valley* project during the Mango Stakeholders meeting and other occasions, including a press conference (Thies24.com, [SEN TY](http://SEN.TY)).

But to know what the mango growers precisely think and feel, you must ask them directly to get their experience and reflection on the topic. That is what *the Green Valley* team did.

TESTIMONIES



Imam FALL, mango producer from the village of Ndiaye Samba Nare.

*“What Green Valley has brought us this year, I have never seen before. I've been growing mangoes for over 30 years, but I've never seen anything as effective as this because, during this campaign, **I had zero infested fruit.** Last year, the number of mangoes I lost to fruit flies was estimated at two tones or more. But **this year, I had no losses.***

***I have more than doubled the income I had in previous seasons. I thank God, and we pray for Green Valley. We ask them to come back for the next campaign if it pleases God because they are doing good things. Let them come back, let them come back!**”*

<https://youtu.be/IeUPWyK9P70>



Mr. Khaly TOP, mango and cassava producer.

*“I am active in the cultivation of mangoes and manioc. We used to have **problems with mangoes, which rotted and were difficult to sell on the local market because of fruit fly infestations.** But thank God, (this year) we worked with the Green Valley National Export Project.*

What hurt us was that Green Valley protected all the mango production for export, but they (Green Valley) were blocked by the closure of the campaign by the authority (a self-imposed export ban).

We pray to God that the next campaign in 2022, Green Valley, will come back to protect it and buy it in time for their export program because then it would be very convenient for us. We accept the divine will that has done this.

As it happens, when Green Valley was rolling out its protocol in our own orchards, even the orchards of our neighbors who were not part of it were protected.

The mangoes would naturally ripen on the tree and fall to the ground. They were excellent and free of fruit fly infestation when we came to pick them. This is the first time we have seen such results.

Previously, when ripe or unripe mangoes were harvested (early harvest), they were already infested by fruit flies.

We thank God for the chance to work with them. We pray to God for a good production next year and that the Green Valley project will come back and be able to buy and export all the fresh mango production, amen!” <https://youtu.be/u2GNt0Kjbps>



Imam Pathé NIAN, mango producer from the village of Thissé.

“I greet you, and I would like to give a testimony on the product brought by Green Valley. I can say that it is a good and very effective product. We have seen the results compared to other products used in previous campaigns.

That's why we want to have the Green Valley product to protect our orchards from fruit fly attacks from now on. *I hope that the Green Valley project will continue and continue to support the mango producers in the village. In terms of sales, we have also seen that **thanks to the Green Valley product, our income has increased significantly this year.** With the support of the project, I am sure that our revenue from the sale of mango production will increase year by year compared to other years when we were facing fruit fly infestations. We hope that Green Valley will come back to support the mango producers in the area. Thank you very much!”* <https://youtu.be/7sZt158x3P4>



Serigne FALL, mango producer from the village of Ndiaye Samba Nare.

*“I live in the village of Ndiaye Samba Nare, and I am a mango producer for Green Valley Fruits Senegal in 2021; when Green Valley arrived in the village, they found two major problems that all mango producers share. The first was fruit flies infesting the mangoes, and the second was the problem of selling. **Because of fruit flies, individual mango farmers were losing at least 50% of their fresh mango production. Then came Green Valley with new technology to protect production.** Indeed, the fruit fly infestations were*

reduced from 50% to a meager rate; 0% to 1%. *We didn't believe at first that something like this could happen. I am currently in my field, and the testimony I can give is that in previous seasons when the winter set in, I was busy digging holes to bury the infested fruit. I did not dig any holes during this year's season because we did not see any fruit flies attacking the mango. The*

producers who did not believe in the Green Valley project and refused to work (under the Green Valley) regretted it afterward because they had merciless fruit fly attacks. As for sales, this year, every producer who worked with Green Valley sold his production at a price he had not expected. In my orchard, where I am currently standing, in previous years, I earned less than 500,000 CFA francs because of fruit fly attacks, and I was only looking for one thing: to get rid of the production before I lost everything, to be relieved. This year, I sold my entire production for at least 750,000 FCFA. This is already a great leap forward compared to what I was hoping to get. That's why all the producers who have worked with Green Valley Fruits Senegal are looking forward to working with Green Valley next year. The other mango growers who had not worked with Green Valley keep asking me whether Dr. FAYE would be back next year or not. As a spokesperson for the mango growers who have worked with the Green Valley Senegal project, I can say that the usefulness has exceeded our expectations. This year we had a much higher yield. We cannot estimate it, but we are convinced of its usefulness. I want to end by appealing to Dr. FAYE and Dr. Nimrod to start very early for the next season in 2022 because if they had worked with 100 producers, they would have double that number (200 producers) in the Ndiaye Samba Nar village area alone. Thank you very much!" <https://youtu.be/jEZaKwp4VnY>



ISSA DIEDHIOU, mango producer in Diannah Kabar.

*“A positive impact, the product deployed by GREEN VALLEY is very effective, and we are delighted because it allowed us to eat good mango during the season. It was excellent, and we were able to sell our fruit well. **I can say that the percentage of infested fruit was less than 5%.** We pray to God that Green Valley comes back. May they be welcome!”* <https://youtu.be/k1mlT1pRRVE>



Khalifa BASSENE, mango producer at Diannah Kabar, Kafountine.

*“The product deployed by Green Valley is good and effective. **Thanks to Green Valley, we sold a lot this year because there were hardly any infested fruits, and all fruits were of high quality.** We are pleased with the Green Valley product. This year we sold a lot more compared to previous years. We had almost no infested mangoes this year compared to previous campaigns, and **we sold our fruit well.** The Green Valley product protected the production well. The second production of mangoes also had no problems.”* <https://youtu.be/xV6z8iSSdIM>



Youssoupha Diedhiou, a mango producer from DiannahKabar (Kafountine, Ziguinchor).

“The protocol worked well. Last year the infested and fallen fruits were very high compared to this year. This morning (N.I., on September 27, 2021, which is long after the end of the harvest season, when typically remaining fruits are 100% infestation), my little niece picked up some ripe fallen mangoes, and when I asked her if they were any good, she said yes uncle!”

<https://youtu.be/d08Yj5A1MtQ>

Now is a good time to pose and ask yourself, again, the same questions asked at the beginning of this column:

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STRENGTH & POWER

Finally, it is clear, small farmers who have till now been perceived as a heavy burden on the economy, actually, under the *Green Valley* program, are found to be the engine for growing Senegal's mango export. Suddenly, when a suitable **business model** is presented and adequately used, smallholders are turned into an asset, enabling Senegal to double its mango export annually. Is there a more remarkable change, promise, and hope than this?

***Green Valley's* business model has proven, under real field conditions, its ability to more than double emerging economies exports, based on and thanks to properly working with smallholders.**

For the first time, there is a sustainable business model that views smallholders

- (1) As an **advantage**, rather than a disadvantage, and **the economic basis for growth**, and
- (2) As a source of **strength and power** rather than weakness, dependency, and inferiority.

We decided to start implementing a *Green Valley* model with farmers in the mango industry, not because it is simple and easy to enter the market, but because we understood that without it, nothing would change.

The contrary is true; mango exports from Africa and Asia have been in continuous decline and dying for many years now. In addition, due to high levels of fruit fly infestation, which are quarantine pests, exports from many countries are completely banned, and from others, it continues, but very little.

Green Valley was able to help the participating smallholders to reduce fruit fly infestation from 50% to less than 1% and to double their commercial production. The result was an income increase and almost doubling the mango export of Senegal.

All this became possible thanks to the strength and power of the *Green Valley* model, which is adjustable to various conditions, demands, and crops.

Now, imagine what can be done on a large scale! Stakeholders have no reason to wait, keeping their farmers one more year in poverty. This is the time for action and good business!

Contact me if you want and are ready to bring a CHANGE to your country's economy and farmers' livelihood.

In a few more days, 2022 will begin. This year can be a year of change and hope for every farmer in Africa, Asia, and Latin America.

THANKS

I want to thank the Honorable President of Senegal, Macky Sall, who honored the *Green Valley* venture with his support.

To Senegal's Minister of Agriculture, Moussa BALDE, his staff members, DPV, and ISRA. Thank you for doing your best to support this long journey.

To the field personnel, the packing house managers, the exporters, and importers who were patient advised and directed to their best understanding.

To Dr. Faye and the *Green Valley* Senegal team, thank you for working tirelessly to fulfill an old dream of; a new and prosperous Africa.

Above all, I cherish the wonderful mango growers of Senegal, who, despite countless disappointments experienced in the past, have put their trust in me and the *Green Valley* team. My respect and deep appreciation are dedicated to you. This project was for you but couldn't be executed without your full cooperation. You showed the world that everything is possible. Thank you.

TAKEAWAYS

- **TECHNOLOGY** is a requirement for advancing agriculture.
- **KNOW-HOW** is a must for stepping forward fast.
- **BUSINESS MODEL** is the driving force behind Technology and Know-how advancement.
- **SMALLHOLDERS** require a tailor-made business model.

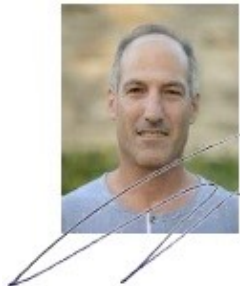
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If you enjoyed the article, please share it with friends and colleagues.

SUBSCRIBE TO THE WEEKEND COLUMN.

**** Mental and Economic Freedom Are Interconnected ****

See you soon,
Nimrod



Text me: +972-54-2523425 (WhatsApp), or [e-mail nisraely@biofeed.co.il](mailto:nisraely@biofeed.co.il)

P.S.

If you missed it, here is a link to last week's blog, "[Follow Your Passion, And You Will Never Regret.](#)"

Links to earlier articles are on the blog of [VALUE CHAIN LINKS.](#)

P.P.S.

Based on your interest, follow the following links to learn more about the Kibbutz system, emphasizing; [Education](#) or [Values and Business](#).

P.P.P.S.

Please take a look at the video series, "[The Agricultural Gap](#)." With short videos, mostly 2 to 4 minutes long, I explain the historical roots of the agricultural gap between Africa and Western countries.

I see this video series as "uncompleted," as I am waiting to gain more confidence before completing the chapters with The Solution, as I perceive it.

If you like it, don't forget to *share* it with those who need to see it and *Subscribe*.

P.P.P.P.S.

COVID-19 changes people's eating habits and raises awareness of several issues, including biosecurity, environment, fresh food, health, and chemical overuse.

[Green Valley Package \(1\)](#) is made to support your efforts to overcome those challenges and take advantage of the latest and promising open opportunities for those who seize the moment and wish to utilize the situation to improve their future.

P.P.P.P.P.S.

[Green Valley Package \(2\)](#) is adaptive, enabling customization and, when needed, further content development.

The key elements of *Green Valley* are:

- 1) ***Freedome*** – the **core technology** for fruit fly control, enabling export quality. It is used as part of the FFCTZ-365 (see below).
- 2) ***Fruit Fly Certified Trade Zone 365 (FFCTZ-365)*** 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 (Green Valley)*** is based on an Israeli fresh produce export model. It is designed for governments interested in adapting their country's agriculture to the 21st Century requirements and demands.
- 4) ***Green Valley Fruits Branding*** – designated fruit certification label of **quality assurance**.

***Change Begins With A Decision
That The Existing Reality Is A Choice
and Not A Decree of Fate***