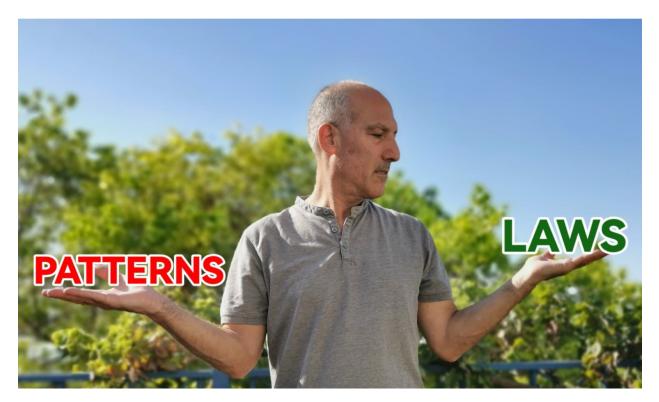# FROM PATTERNS PERPETUATING POVERTY TO HARNESSING UNIVERSAL LAWS FOR SMALLHOLDERS' PROSPERITY

"The prevalence of poverty among smallholders is no random occurrence, and their future prosperity won't be either."

PREFACE

This week, I met with Oren, a former soldier of mine who lost his son Adam in the murder attack in the south of Israel. We talked about the power of life that eventually overcomes everything.

In memory of Adam and over 1,400 murdered victims of the genocide in south Israel, over 200 kidnapped, and over 4,000 injured, many of which were farmers, I light a candle of hope and brotherhood among all humans.

Chillingly, while dark forces are doing everything they can to separate the humans and wreak havoc, the topic of the column, which was supposed to be published on October 7th, the day of

the attack, is as opposite as can be: cooperation, Connection, Organization, and Integration for the betterment of all.

Humans experience constant tension; part within us strives for separation to present its uniqueness, ready to kill for it, while the other part looks for cooperation to increase happiness.

My weekend column is dedicated to increasing cooperation for the sake of greater happiness for all.

IT'S SCARY HOW ACCURATE IT IS

I cannot over-emphasize the importance of the topic I will discuss in this column.

When you finish reading it, you can move on to your next thing and forget about it, or let it change your life and those of others. I do hope you take the latter path.

In the following paragraph, you will learn HOW (with complete certainty) -

- You can create a long-term strategic shift in the agro sector of your country towards a future of prosperity and happiness.
- If you wish to abuse this knowledge (which I hope you won't), you can use it to sow destruction and pain.
- You can accurately predict the level of Success of projects and national economies and even foresee an imminent war.

Yes, like TNT, atomic energy, and others, the same knowledge can be used to increase or decrease global well-being and human happiness; as always, it is in our hands.

Based on what we learned here, in the next column, I will share examples of how we can use the principles we learned here to better human lives or to sow hatred and separation.

In the next column, we will see how, without military intelligence but with complete certainty, ten months ago, I told my son, who is serving in the army, "*This year, there will be a war*", and a month ago, "*A war is very near and certain. It can happen any moment, maybe a day, a week, or a month, and it will be more horrific than we imagine.*"

This column is not about predicting the future but creating the future we want and dream of. It is mandatory to be able to predict the future to create a better one accurately.

How did I know in complete certainty a war was coming?

How can we design the agro sector to reach the desired prosperity level?

Note. What I'm trying to convey here is for strategic and visionary leaders, investors, managers, and business people.

When you apply the knowledge discussed here in the agro sector, you will feel its earliest impact within as little as a year and see a complete turnaround within five to seven years.

THE DEFINING CONCEPT

Can the same phenomenon be a double sword: destroy countries and create poverty, hunger, wars, and death but also prosperity, well-being, and security?

Could it be that the above outcome is entirely under our control?

As we will soon see, the same phenomenon based on **universal natural laws** is responsible not only for disasters but also for agricultural prosperity, welfare, national security, and the most beautiful things that man has created, including the pyramids, the Bible, the oratorio, *The Creation* (by Haydn), *The Creation of Adam* (by Michelangelo), the computers, AI, landing on the moon, etc.

The phenomenon responsible for all the good and bad things described above is called - *INTEGRATION*.

To ease and facilitate the handling of the *integration* concept, we will add the adjacent terms, *organization,* and *cooperation,* which are easier to explain and understand.

As we will soon see, the level of "integration" and how it is used determines if your farmers are poor or prosperous and the state of the other national sectors, which impacts the national economy.

If *Integration* represents well-being, improvement, and hope, then *Disintegration* is the mother of human problems, evil, and wrongdoing.

This topic is so critical to the future of agriculture in developing economies that the coming *International Conference On Business Models In Agriculture* (IBMA) 2024 is dedicated to *Organization*, and one of the IBMA pillars is *Cooperation*. Don't miss it (click here to register).

But wait, let's not get ahead of ourselves; let's take a step back and understand why Integration and its opposite term, Disintegration, are unique terms holding superpower abilities.

THE THREE ORDERS OF CERTAINTY

Everyone wants to predict the future, so we can reduce risks and invest our resources only in "sure things" and high-return activities.

There are three fundamental methods of predicting the future:

- **PATTERNS** is a recurring theme, design, or element that can be identified in various contexts. Patterns are an excellent method for explaining past events or the future in a non-changing environment. Patterns have low reliability in predicting the future.

  Examples: Human behavior, traffic, economics, and culture.

- **THEORETICAL MODELS** - are simplified representations used to understand or simulate complex systems or concepts. Models are suitable for explaining past and future events within the model's predefined scope, including in a changing environment. However, the model's scope and limits are often unclear.

  Example: Models in finance investments, irrigation, flight, and medicine.

- **THE LAWS OF NATURE (LAWS) - are** fundamental, consistent rules governing the universe's behavior, often described through scientific principles and equations. Laws accurately explain the past and predict the future, including in a changing environment.

  Examples: Gravity. Newton's laws of motion, Laws of thermodynamics, and the famous equation E=MC2

Let's rate the reliability of predicting the future of the three methods -

MAXIMAL RELIABILITY: *Laws of Nature* fully predict the future; e.g., gravity always and anywhere works the same way.

MEDIUM RELIABILITY: *Theoretical* models are highly reliable within defined limits; e.g., a low-speed flight model differs from the one required for a high-speed flight.

MINIMAL RELIABILITY: *Patterns* are the least reliable in predicting the future, e.g., in 15 years (over 5,000 days), Hamas didn't invade Israel and capture one community, one village, until on the morning of October 7th, the Pattern broke, and 24 Kibbutz, Moshav, and Urban communities were invaded, murdered, and kidnapped.

Now that we know the reliability of each prediction method, we should ask: which is currently used in the agro sector, and what are the outcomes?

PREDICTING AGRO PROJECT SUCCESS

Let's use the AGRA project as an example to learn which prediction methods are used to improve smallholders' livelihoods in developing economies.

Before initiating the AGRA project, Bill Gates and his team studied the state of agriculture in developing vs. developed countries.

Subsequently, they noticed the following:

Farmers in developed countries use advanced inputs, i.e., varieties, technologies, and knowledge. They also noticed that those farmers have high yields and income per hectare and hence enjoy a high standard of living.

Simultaneously, Gates and his team noticed that farmers in developing countries present the opposite characteristics, i.e., they use local "not advanced" varieties, subsistence technologies, and knowledge, their yields and income are low, and they live in poverty.

Based on those observations, Gates and his team formulated the **Pattern** that emerged before them as they understood it.

THE PATTERN - Farmers with advanced production inputs (e.g., seeds, technologies, and know-how) get higher yields and income and enjoy better livelihoods versus those with less advanced inputs. Furthermore, they noticed that this Pattern is global.

Could there be something more sure and certain than a global pattern!?

Based on this, Gates and others established the AGRA project.

The plan was simple, "*We will increase farmers' access to advanced inputs. According to the observed global Pattern, the outcome **must be** farmers with improved livelihoods; Poverty is gone, job is done.*" Or so, at least, they expected and believed.

In the next 15 years, AGRA provided millions of African farmers with improved seed varieties, technologies, fertilizers (which Gates called Magic), experts, etc.

Yet, fifteen years and tens of $ billions later, farmers under the AGRA program are as poor as their neighbors who are not part of it.

This is not unique to AGRA. For example, farmers and agro experts from developing economies come to Israel to emulate what the Israelis are doing, believing that if they do the same, they will get the same business results, which, unfortunately, never happens.

What can we learn from this?

- *Patterns* are the leading method used when planning projects to help smallholders in developing economies.

- *Theoretical Models* and *Natural Laws* are not used in planning and predicting the outcome of projects aiming to create prosperity for smallholders.
- The most common *Pattern* used to help smallholders can be summarized as "*More technologies, more income*".
- Projects, such as AGRA, using *Patterns* to improve smallholders' livelihoods have regularly and repeatedly **failed**.
- When a Pattern is used and fails, there is no way of knowing why since it is based on Do and not robust Theory (i.e., Model) or Law.
- How can we "fix" a Pattern-oriented failed project without a theoretical basis?

* Do not confuse financial (excel) models to crunch numbers with general theoretical models designed to simplify and simulate complex systems or concepts. In this column, the word Model refers to Theoretical Models.

Based on countless empirical observations over decades, it is safe to say that patterns are ineffective in designing, creating, and predicting the Success of projects aimed at increasing prosperity for smallholders.

We have used the *Pattern Method* for decades, too often mixing cause and effect, which made us make colossal mistakes, leaving hundreds of millions in poverty over decades.

We must immediately abandon the *Pattern* method and switch to a method with predicted, strategic, and long-term outcomes.

It means switching immediately to *Theoretical Models* or *Natural Laws* to design, execute, and predict the outcomes of agro projects in developing economies.

In recent columns, I discussed theoretical models thoroughly, particularly disruptive ones. However, we never discussed how the agro sector can use and benefit from applying Natural Laws daily.

I am excited to share a novel concept of harnessing Natural Laws to create prosperity among impoverished rural communities.

UNIVERSAL NATURAL LAWS

The beauty of Natural Laws (Laws) is that regardless of who you are, where you live, age, gender, or political agenda, the same Laws control all creatures and objects. As we will soon see, even human society is subject to the same Laws.

Isn't it beautiful!?

By harnessing Natural Laws, Homo sapiens, we managed to fly, dive deep in the oceans, create electricity, improve communication, etc.

But did we ever use those Laws to improve society and, more so, to bring prosperity to the hundreds of millions who suffer poverty, most of whom are smallholders in developing economies?

This brief introduction is dedicated to introducing a relevant Law and then seeing its implication in **social sciences**, and in our case, to improve smallholders' livelihoods.

Don't be intimidated; I will keep the scientific part short and simplify and explain anything that seems complicated.

To avoid a too-long column, I will add examples analyzing cases you are familiar with in the next column.

INTRODUCTION TO HARNESSING NATURAL LAWS FOR THE BENEFIT OF SMALLHOLDERS:

<u>**PHYSICS**</u>

The second law of thermodynamics states that "*As one goes forward in time, the net entropy (degree of disorder) of any isolated or closed system will always increase (or at least stay the same).*"

In translation to human language, all systems in the universe (including humans) continuously shift from a state of order to a state of less order unless we actively act to prevent this.

Entropy is a measure of order/disorder relevant across the universe and in our daily lives.

Examples:

Put an ice cube on a plate, and you will see it dissolve and turn into liquid (water) as its level of internal order decreases. If you wait longer, you will see the water evaporate, turn into gas, and shift to an even lower order level. However, if we like to turn the water gas back into an ice cube, we will need to invest more energy in restoring the initial state than it took to disorder it.

Similarly, if we look at a building, a rock, or a human body, we will always see their shape and typical characteristics deteriorate with time. That is the process of "getting old"; our body slowly moves to a lower level of order until we die and, when buried, becomes part of the environment.

SOCIAL

The law of entropy is universal and, hence, unlimited to physical objects and systems, but it also applies to **human organizations**.

Accordingly, like a physical object, e.g., an ice cube, a human organization naturally tends to decrease its order level, going through a process called Disintegration.

Like the ice cube, we must invest energy to keep and maintain an organization in its original shape. If we wish to create a new organization or change an existing one (e.g., water gas to an ice cube), we must invest much more energy.
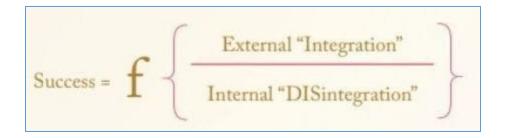
In human organizations, the "energy" we invest presents itself as - management, knowledge, hierarchy, wages and benefits, studies, models, laws, procedures, organization design, etc.

Dr. Ichak Adizes, an expert in human organizations, presented the "organizational" version of the second law of thermodynamics, which we will call - the law of Success.

According to Adizes's law of Success, the *Success* of an organization is a function of its external Integration (the level of order in the organization) divided by its internal disintegration.

Now, let's "translate" this into plain language by looking at the parts of the equation -

- **External Integration -** is influenced by our capabilities and opportunity utilization.
- **Internal disintegration -** is affected by the level of mutual trust and respect.
- **Success -** is reflected in things like happiness, earnings, career growth, integrity, etc.

$$\text{Success} = f \left\{ \frac{\text{External "Integration"}}{\text{Internal "DISintegration"}} \right\}$$

The law of Success by Adizes directly relates to the second law of thermodynamics.

Hence, the law of Success represents a Natural/Universal Law, meaning it applies in any environment to all human systems, cultures, individuals, and organizations. It is powerful!

Have you started seeing the difference between the limited and unreliability of *the pattern method and universal laws*?

The law of (social) Success enables us to design and build better organizations (including rural ones) and predict organizations' performance and Success ahead of time.

If you wish to see and know an organization's (e.g., business, community, country) future accurately, using Natural Laws will enable you to do that; it doesn't get any better.

Take another look at the equation above and note the following:

- The universal laws of thermodynamics and Success are "blind" to industries, sectors, cultures, countries, religions, beliefs, etc., that differentiate people.
- Disintegration is the source of all problems.
- An organization with low capabilities, i.e., low external Integration, can still do well if the internal disintegration is minor.
- Technology is not a requirement for Success according to the second law of thermodynamics and the law of Success.

In the next column, we will discuss the meaning of Integration and Disintegration, how it affects organizations of any order and magnitude, and how it applies to agriculture and smallholders. Real-life examples will accompany this.

To light a candle, bring light, and create your positive legacy, contact me to impact the agro sector in a developing economy. nisraely@biofeed.co.il WhatsApp +972-542523425

TAKEAWAY MESSAGE

➢ **PATTERNS VS. LAWS:** Rely on universal natural laws for accurate predictions and transformative changes in organizations and agriculture.

➢ **THE LAW OF SUCCESS:** An organization's Success is a balance between external integration and internal disintegration.

➢ **PREDICTIVE POWER:** Natural Laws provide unparalleled predictive capabilities across diverse sectors, transcending cultural, industry, and technological boundaries.

➢ **FROM CHAOS TO ORDER:** Apply the science of integration to combat disintegration, making smallholders' prosperity and societal well-being achievable goals.

Follow me on LinkedIn.

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

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

See you soon,

Nimrod

Dr. Nimrod Israely is the CEO and Founder of *Dream Valley* and *Biofeed* companies and the Chairman and Co-founder of the IBMA conference. +972-54-2523425 (WhatsApp), or email nisraely@biofeed.co.il

P.S.

If you missed it, here is a link to last week's blog, "*The Genocide of Israelis by The Hamas In Southern Israel*".

P.P.S.

Dream Valley is a field-proven disruptive business model based on the successful Israeli model.

To learn more and become a Dream Valley partner, contact me at nisraely@biofeed.co.il, +972-542523425 (WhatsApp/Text)

If you like it, please **share** it with those who need to see it and ***Subscribe***.

Change Begins With A Decision

That The Existing Reality Is A Choice

and Not A Decree of Fate