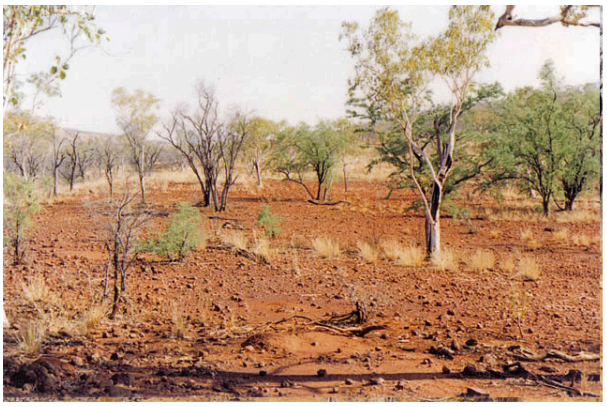
Kachana Station – the management or custodianship responsibility for 77’500 ha located in remote rugged upper catchments of five Kimberley river-systems

- **Water-security paves the way for biosecurity**
- **There is value in restoration**
- **There exists a dire need for investments that pay it forward**

Kachana 11.04.2024 - In a warm climate with an average of over two liters of water per square meter per day, tons of new vegetation grow every year. Much of what does not feed herbivores or small organisms, gets burned. This happens either by design or by default. – But do far better options exist?

What follows has been put together from notes prepared for the discussion.



 # 13 - November 1992

 # 13 November 1997

The land was telling us that it was hurting and that something was very wrong! – So, we listened.

Having been acquainted with the area since 1985, and then living on Kachana since 1991, Chris posits:

1. Water-security paves the way for biosecurity

(Without first establishing water-security, there simply is no biosecurity!)
In seasonally dry regions, prioritising better water-stories, promises to then protect both [currently] sustainable as well as [current] regenerative practices, and thus biosecurity.

In seasonally dry country, a better water-story will soon need to eclipse a better food story. Within desertifying broader landscapes, regenerative farming practices cannot be sustained over time. Farms become time-bombs where agriculture eventually implodes with devastating social consequences. *(The 2009 drought in Syria is but one example of such a scenario.)*

2. There is value in restoration

- **The return on investment (ROI) is "cheap" insurance in the short- to medium-term.**
- **A legacy of added productivity is paid forward** to benefit future generations.

Rather than risking social turmoil and escalating migrant crises, investing in better water-stories is a form of "cheap insurance" for 1%ers who might wish to enjoy old age in security.

3. There exists a dire need for investments that pay it forward.

This is nothing new. Legacies that 'First Do No Harm', but then provide measurable services to present and future communities, are what sustain human thriving.
History supplies two examples that have been embraced by many cultures over time:

A. Investment in <u>military defence-infrastructure and training</u>.
   This protects citizens and their economy, allowing planning and daily activity to go ahead with a sense of a viable future.
   (Here I do not mean military offence capabilities and the production and sale of weapons, but the securing of rights and of order within a Nation.)

B. Investment in <u>hospitals, clinics, medical faculties and training in health- and aged-care.</u>
   Lives are saved, allowing recovery from trauma and facilitating rehabilitation and re-integration into active participation in society.
   (Here I do not refer to the production and sale of pharmaceutical products, but the enabling of mental and physical wellbeing of people, and providing conditions that are conducive to healing.)

C. In line with the manner in which societies justify annual allocations of resources into arenas of defence and health, I propose a third category:
<u>Ecological restoration through the introduction of mobile landscape management academies.</u>
These would function literally as temporary field hospitals on ecological "battlefields", rehabilitating deserted or desertifying land, whilst providing experience and skill-training.
(Over time, such investments have the potential to lower the need for 'A' and 'B'.)

Investing as if great grandchildren mattered *

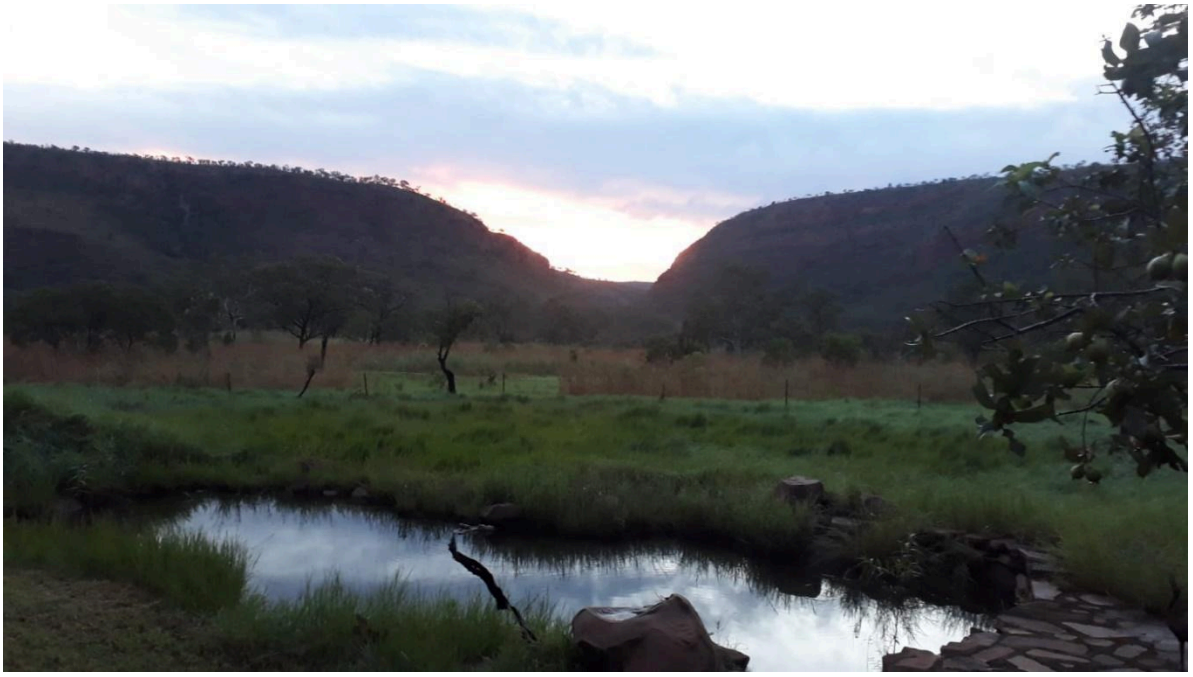
I.e. investments in the training of **land-doctors** as well as in the regeneration of what are currently ecological liabilities.
Contexts where priorities remain obvious on a daily basis, where participants gain training and experience in real-life day-to-day challenges as they go about reclaiming, revitalising and regenerating landscapes that no longer support abundance as they once did, or as they might.

- Investing in areas where agriculture is currently failing
- Investing in areas where agriculture is no longer conventionally viable
- Investing in areas where there has been no known agriculture and that have become prone to any combination of fire, flood, drought or other natural disasters.

If backed by community sentiment, in many instances such investments merely require appropriate levels of seed-funding in order to later become self-funding net-wealth-generators.
'Quick bang for the buck' opportunities, (e.g. simply transiting from extractive to regenerative, or speculative acquisition of land,) whilst perhaps lucrative for participants and investors, commonly distract from paying attention to the need for true wealth generation.

'Paying it forward' is nature's way as she manages for abundance.

- Think of how wild birds feed their hatchlings.
- Think of how wild herds protect and nurture their young.
- Think of how functional families might invest in the raising and educating of children.
- In fact, any vibrant ecosystem functions by paying it forward!



Kachana March 2024 - By mimicking and by tapping into nature's wealth-building processes new new opportunities can be offered to those who come after us.

It was not so much the actual consumption of nature's abundance that has brought about the desertification of vast parts of the planet, but the disruption of the wealthbuilding processes that would have allowed decontamination, regeneration and renewal.
As Paul Hawken once wrote: Death is one thing; stopping rebirth is quite another.
It is into this vacuum of ceased or restricted rebirth, that SEEDS NEED TO BE PLANTED that will regrow and regenerate our planet's wealth-building capacity.
How can investors justify modified ROI in order to risk seed-funding to regenerate economies that once again pay it forward?
On Kachana we have 35 years of experimentation and demonstration-sites that explore this.

* **Investing as if great grandchildren mattered.**
The Reasoning behind this: People commonly invest as if their own children mattered. After WWII we had nearly a whole generation of children whose parents were often and understandably guided by the thought **"Never must my precious little one be exposed to the horrors that I have witnessed in my lifetime!"**
This resulted in "the baby boomers", broadly speaking, arguably one of the most privileged, spoilt and egotistical generations ever.

I was therefore known to say that we need to begin making decisions, as if our grandchildren mattered. Now that I have grandchildren of my own, I see how easily my judgement could become clouded by the love that I feel for each of them.

When I make decisions **as if great grandchildren mattered**, I am making decisions that will affect lives of people I do not know. - It follows that whatever will be in the interest of my great grandchildren, will simultaneously be beneficial to those around them.

Detailed responses to Koen's questions

Kachana comes with a management or custodianship responsibility for 77'500 ha

- *300 hectares we manage intensively*
- *2'500 – 3'000 ha we manage semi-intensively*
- *75'500 ha we manage extensively*
- *Of these 40'000 ha we seek to surrender in total or in partnership with the aim of establishing a Savory Hub: Kachana West - explanatory two-pager*

Q: Why are you doing what you are doing? Why Soil?

- **Why are you doing what you are doing?**

- I work at doing three things at the same time
    1. **Vocation** This is what I am passionate about.
       Exploring ways and hurdles that come with testing proven methodologies in new contexts.
       (I.e., putting mega-fauna back to work; tapping into renewable biological energy)

    2. **Civic duty** To many, this comes across as an inconvenient truth and often attracts "shoot the messenger" responses.
       To make fellow citizens aware of the dangers associated with a bad water-story and how we might achieve water-security at regional levels.
       (I.e., rebuild landscape function on nature's terms)

    3. In what I hope to be a **multigenerational investment**, I am participating in what I call the ultimate real-estate opportunity. – Meaning we take neglected land and explore and develop it's natural solar-energy harvesting potential.
       Rather than competing for a finite amount of depreciating bank-notes, on the back of diminishing resources, I seek out viable and ethically sound wealthbuilding opportunities that open doors for entrepreneurial young people.
- It all began with what I saw to be a wealthbuilding opportunity.
- Using nature's forces to reclaim deteriorating land - harnessing processes and forces to build again what she had already demonstrated in other areas or during earlier ages.
- At the time I could not even begin to imagine how much was possible.
- We had the basic ingredients:
    - Rocks, sands, silts and clay
    - Free Sunshine on average 24 hours a day
    - Over 800 litres of rainwater per square meter per year
      800mm rainfall per year corresponds to 2.2 litres per square meter per day (on average)
      (even 600mm per year would correspond to 1.6 litres per square meter per day)

  The key, in my mind, was 'management'.
- What that management would need to look like, I was not at all sure of at the time.
- Naïvely, I thought that I could compensate for a lack of local knowledge and limited capital with good sense and perseverance – I further recognised mother nature to be the most important teacher.
- Back in 1985, my sense was that I'd need 100 years to do Kachana justice.
- I soon learnt that I would need at least 150!
    - **Why Soil?** living soil, as opposed to sterile dirt or rock

Soilbuilding is the area where we can achieve maximum impact in relation to climate-stability.

- **In a way soil is the foundation of all higher life-forms**

All higher life-forms on the planet rely to a great degree on plant-life.

a. To clean and regulate air
b. To manage rainfall and water-cycles
c. To provide nutrition

Soil **is** the digestive system for most terrestrial plant-life on this planet

- Imagine trying to live without your digestive system…
- Try farming without soil…

Human civilisations have repeatedly collapsed as they inadvertently mined the life out of their soils. What makes modern agriculture so unique is that, **as we torture our soils to yield**, not only are we mining the life out of them, we are also poisoning them, suffocating them, and depriving them of "sleep", water and energy.

The aim of maximum out-put tends to keep the focus on managing in-puts.
As with a racing car we keep refining the parts and tuning the engine for maximum performance.
But nature is not a racing car. **Nature is an economy.**

Imagine a car whose engine *(like a flame)* can grow bigger (or smaller) while it is running, all depending on how much fuel it can get!
We deal with: **Intake** - (management inputs) – **output**
If we wish to stick with the engine (or flame) metaphor:
Increased performance is most readily achieved by increased intake.
Management and/or influence (i.e. inputs) then serves **not** to drive actual out-put, but merely to optimise processes/performance.

Once they take a closer look at regenerative agriculture, this is what smart investors intuitively understand. – Natural capital is already available and positioned for wealth-generation!
It is primarily a matter of accessing opportunity and then re-incentivising biology do the heavy lifting.
As contextual understanding evolves, so do the possibilities of streamlining.
Nature provides, nature selects; nature bats last.

It makes good sense to play on her team! – and by her rules!

Q: What should smart investors, who want to invest in Reg ag and food look out for?
Opportunities where intake is currently being limited by manageable human factors.

- ROI – A 'Return on Investment' focus needs to embrace "**in-take**" over "in-puts"

Justifiably the aim will be on high "Return"; i.e. higher returns, on the **IN**vestment
Conventionally we attempt to manage IN-puts in order to achieve greater OUT-Put
(Intuitively we are tempted to view 'out-put' as a function of 'in-put'.
*Instead, we now focus on increased '**in-take**' to drive 'out-put' [i.e. effectiveness];*
managing in-puts then allows us to tweak processes for added efficiency.)

- We shift beyond a focus of 'sustaining production', to one of increasing productivity. *(i.e regenerating the productive capacity of the resource base that we manage)*
- Such an appreciation of capital may need to happen, even if (in the first instance) we may not achieve increases in actual final product. *(i.e. interest generated by natural capital)*
- Environmental Outcomes Verification (EOV) is a useful vehicle to measure other 'out-puts'. *(This indicates the growth or strengthening of our natural capital base.)*

Q: What do you believe is true about regenerative agriculture that others don't believe to be true?
Inspired by John Kempf

> **John** Kempf: What I believe to be true about regenerative agriculture that is different from what many other people think about is what the engine of change actually is. And there is this idea within and particularly within the domain of organic and biological or regenerative agriculture that it takes healthy soil to grow healthy plants.
> John Kempf – Forget about soil, Focus on plant health instead
>
> investinginregenerativeagriculture.com/2019/07/29/john-kempf/

I am not in a position to speak of what others believe. In regenerative agriculture, I include regenerative pastoralism; not only to feed people, but also to provide environmental services at

broader landscape levels. - Regenerative agriculture, I believe, offers the opportunity to heal society's life-support system in ways that are in tune with the grand scheme of things.
Observation of Nature indicates: **Form follows function.**

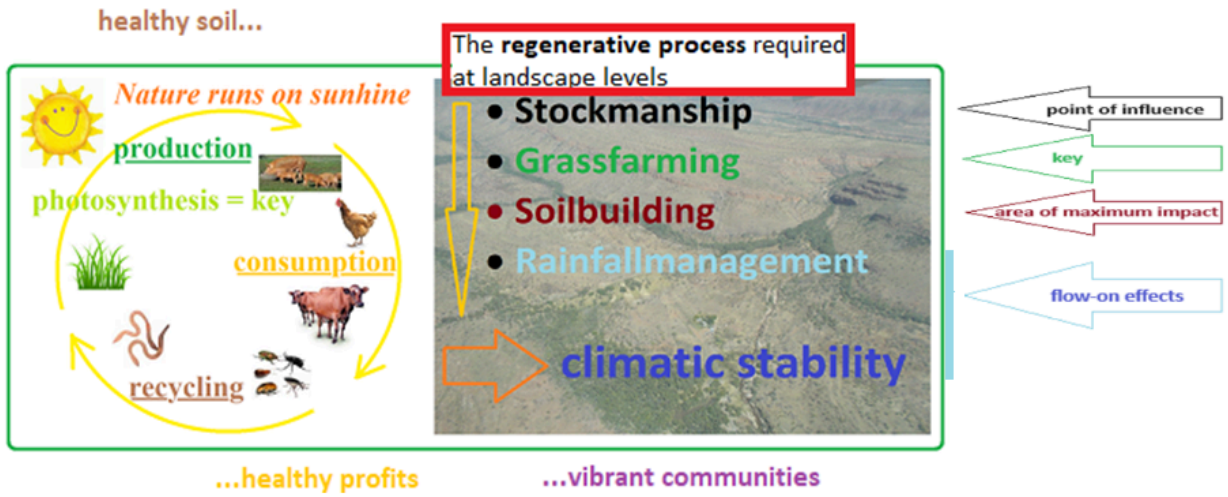
If / when the primary challenge is production (feeding people), then I whole heartedly agree with John Kempf. – Soil, even if it is sick or lifeless, is usually already available in some shape or form. *(Plants build soil. Therefore, manage for healthy plants and they will take care of the soil for you. This thinking we integrate into our approach on Kachana: appropriately manage the animals that keep healthy the vegetation; and the vegetation will build the soil. - As Elaine Ingham reminds us: the plants are in control!)*

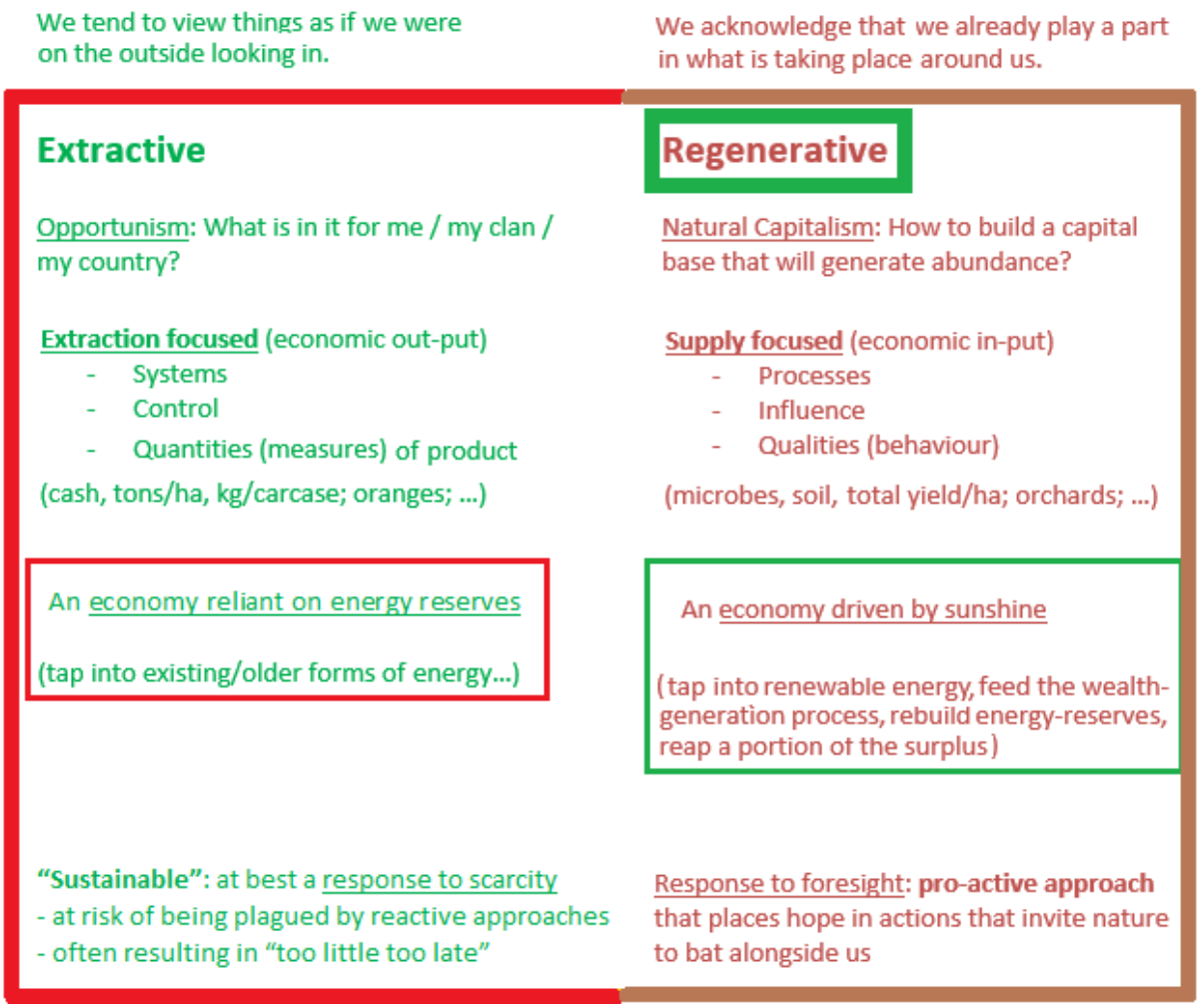
If / when we have a situation (as in Australia) where we risk losing water-security long before we run out of things to eat, accents then often need to be adjusted to allow for context-specific challenges.

In dehydrating landscapes physics kills biology: **No water-security** translates to **no biosecurity**.
In well hydrated landscapes physics energises biology: Water-security sets the stage for biosecurity and abundance!

There is no need to elaborate on the fact that the healthiest of plants will not survive dehydration. Therefore, when we take a landscape perspective or a regional approach, we also need to actually manage holistically. This means full accounting and managing the whole economy.

Complex? - Yes.
But simple, once we accept nature as our instructor.





Q: If you could wave a magic wand and change one thing in the agriculture industry from a sustainability point of view, what would it be?

"If you eat you are involved in agriculture."
I'd have everybody waking up next Monday morning with the realisation that we are all in this together.
That symbiosis as a principle outranks competition.
That politicians, regulators, farmers and consumers need to work for each other and with each other, and not against each other.
That nature already has viable models in place that we can mimic.

Stop penalising actual regeneration!
I.e. stop directly as well as indirectly taxing activity that increases productivity.

- Provide real and simple tax-incentives for actions that are beneficial to the health and vibrance of society.
- Reasonably tax all actions that may be necessary to sustain safety and order, but that in the longer term would harm society, and/or that may be undesirable, and/or that can overtime be replaced by sounder practices.
- Introduce full economic accounting that internalises all costs of production. *(see: Paul Hawken)*

Q: What would you do if you were in charge of a 1B investment portfolio tomorrow morning?

With immediate effect I would embark on designing an investment-culture **as if great grandchildren mattered.**

An investment culture that grows 'bottom – up'.
One that pays value-increases forward whilst rewarding annual inputs with fair returns.

The question is however a tad unfair! My life's focus has been on wealth generation as opposed to maximising cash-flow. – In fact, I view cash-flow to be the oil that lubricates the wealth-building engine. The engine is biology (biodiversity in my case) and it runs on sunshine and rainfall.

But to answer the specifics relating to that question:
- I'd sit down and conduct an analysis of the different positions
    - Secure cash-flow
    - High ROI (with higher risk)
    - Lower ROI (less risk)
    - Conservative parking of funds with minimum risk
    - Trending increase in value
    - Appreciating assets
    - Underperforming assets
    - Dormant potential
- Depending on their values, needs and appetite for risk, I'd put together for my client-base a portfolio-balance that they understand and feel comfortable with.
- Then with an investment-mix in place, I'd focus on taking them on a wealth building journey in line with what nature has already shown and taught us.
- Opportunities that beckon, are the matching of proven track-records with untapped potential, in contexts where biology/nature are already positioned to do the heavy lifting.
    1. accessing/locking into capital value
    2. investing in appreciating assets:
        - motivated staff
        - appropriate skill-sets
        - biology whose growth will primarily be driven by increased in-take (solar energy, carbon and climate)
    3. investing in appropriate scale-neutral and multifunctional inputs
    4. investing in only the necessary minimum of depreciating equipment
- Trim the ecological sails in a manner that nature will fill them for us with her array of physical and biological forces; continuously work at improving management
- Build in flexibility (and redundance where appropriate)
- Leverage off demonstrated success
- Identify new opportunities that become obvious with growing experience and new knowledge
- Work with insurance companies to reduce fire, flood, drought and disaster risk
- With good communication and education, foster local ownership of triple -bottom -line outcomes

As long as the sun shines and rain still drops out of the sky, nature can teach us how to rebuild wealth!