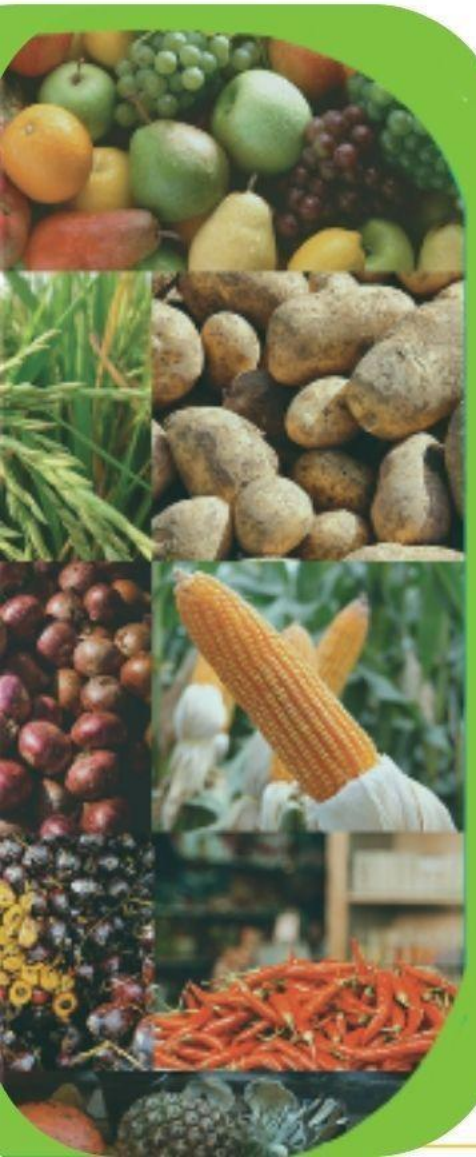
SAPUTRA GLOBAL HARVEST



Saputra Agriculture Technology

GLOBAL FOOD CRISIS

https://www.cnbcindonesia.com › news · Translate this page

Berulang Kali Diingatkan Jokowi, Apa Itu Krisis Pangan?

Jun 22, 2022 — "Kita perlu waspada benar stok komoditas tahun 2022/2023. Karena ketidakpastian **global** hingga 3 tahun mendatang. Yang bisa dilakukan adalah ...

https://ugm.ac.id › berita › 22620-pa... · Translate this page

Pakar Pertanian : Krisis Pangan Sudah Terasa

Jun 22, 2022 — **Krisis pangan** 2022 yang melanda banyak negara dunia sudah ada di depan mata. Bahkan, beberapa negara ternyata sudah mulai merasakan ...

https://dunia.tempo.co › read › dunia... · Translate this page

Dunia Dibayangi Krisis Pangan, Apa Itu Krisis Pangan dan ...

Jun 23, 2022 — FAO menjelaskan bahwa **krisis pangan** merupakan kondisi ketika bahaya pangan akut dan malnutrisi menjaring meningkat tajam. Dampaknya mulai dari ...

REPUBLIKA.co.id

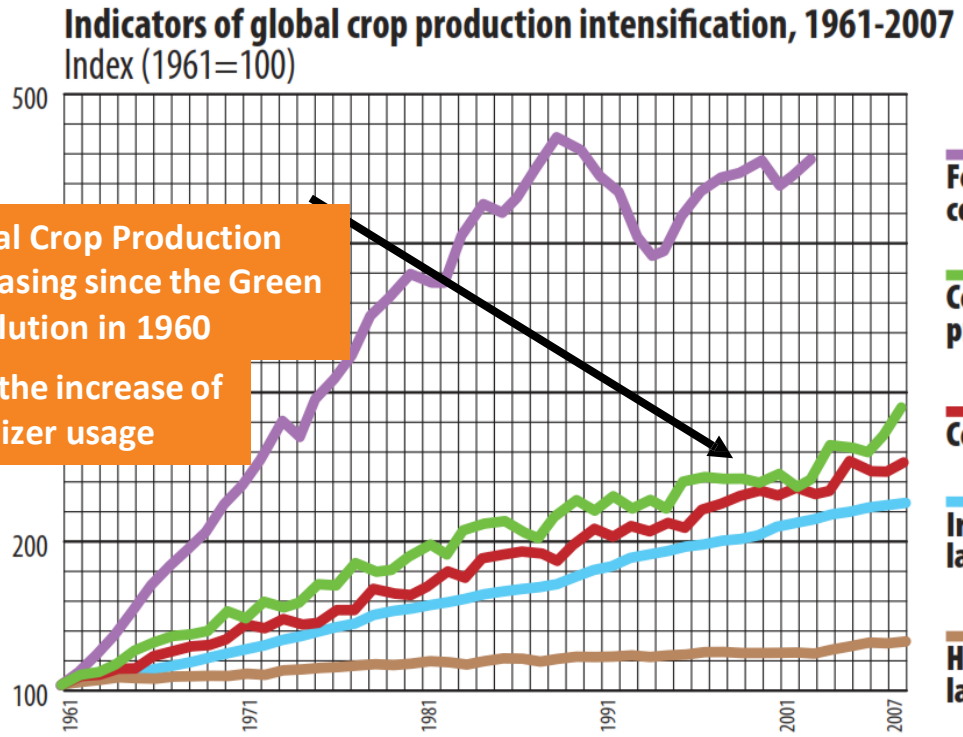
Krisis Pangan Dinilai Perlu Diwaspadai

3 hours ago


https://suntoro.staff.uns.ac.id › files › 2009/04 › 1... PDF
Degradasi lahan & ancaman bagi pertanian
by IHSW Atmojo · Cited by 21 — Pencemaran dan kerusakan lingkungan di lingkungan pertanian dapat juga disebabkan karena kegiatan industri. Pengembangan sektor industri aka...
https://www.gatra.com › news-44480... · Translate this page
Pengamat: Rusaknya Lahan Pertanian Ancam Ketahanan ...
Sep 16, 2019 — Ia lantas merujuk pada data Tech-Cooperation Aspac FAO yang menyebutkan bahwa 69 persen tanah pertanian di Indonesia dikategorikan sudah rusak ...
AGRICULTURAL LAND IS DAMAGED

AGRICULTURAL CURRENT CONDITIONS

1



Global Crop Production increasing since the Green Revolution in 1960

with the increase of Fertilizer usage

Region	Severity and extent of nutrient depletion (Mha)			
	Light	Moderate	Strong	Total
Africa	20.4	18.8	6.2	45.4
Asia	4.6	9.0	1.0	14.6
South America	24.6	34.1	12.7	71.4
Other Regions	2.8	1.2	0.0	3.9
Globe	52.4	63.1	19.9	135.3

† Derived from UNEP/ISRIC, 1990; UNDP/UNEP/FAO, 1994a; Scherr and Yadav, 1996; FAO, 19

Land area affected by nutrient depletion. †

Country category‡	Harvested area	Harvested nutrition depletion rate			Affected area			Total nutrient deficit			
		N	P	K	N	P	K	N	P	K	NPK
	Mha	kg ha^{-1} yr^{-1}			Mha			Gg (10^9 g) yr^{-1}			
Developed countries	207.0	−15.0	−4.9	−0.7	107.7	151.3	1.3	−1,610	−745	−0.9	−2,356
Developing countries§	309.6	−18.4	−5.1	−39.5	175.1	266.4	283.3	−3,213	−1,354	−11,188	−15,755
Least developed countries	45.5	−20.7	−4.9	−32.6	31.4	31.8	31.5	−651	−155	−1,028	−1,833
Global mean	562.1	−17.4	−5.0	−38.7	314.2	449.6	316.0	−5,474	−2,253	−12,216	−19,944

† Area-weighted average of wheat, rice, maize, and barley production systems.
‡ Cited from 2001 FAOSTAT database (http://apps.fao.org).
§ Excluding the least developed countries.

Mean rates † of nutrient depletion and total nutrient deficits in the year 2000.

2

but an increase in fertilizer use is following by decrease in soil nutrients

AMERICA'S VANISHING NUTRIENTS:

Decline in Fruit and Vegetable Quality Poses Serious Health and Environmental Risks

By Alex Jack

America's food is losing its nutrients, vitality, and taste. New research indicates that the vitamin and mineral content of apples, oranges, and other ordinary fruits has declined on average 25 to 50% during the last generation. The study is a follow up to earlier research by the author showing that, according to the U.S. government's own food composition tables, common garden vegetables have lost large amounts of calcium, iron, and other essential elements since the 1960s and 1970s.

3

and vanishing nutrients in agricultural end products

Illustration : What is an orange made of?

1. Air (*Hydrogen and *Oxygen)
2. *Karbon
3. *Nitrogen
4. *Potassium (0.185%)
5. *Calcium (0.074%)
6. *Phosphorus (0.022%)
7. *Magnesium (0.015%)
8. *Sulfur (0.014%)
9. Sodium (0.0018%)
10. *Iron (0.00078%)
11. *Boron Strontium Aluminum
12. *Manganese
13. *Copper
14. Titanium
15. Nickel
16. Vanadium
17. Chromium
18. Zirconium
19. *Molybdenum
20. Tin
21. *Zinc
22. *Chlorine
23. Cobalt
24. Barium
25. Silver
26. Bismuth

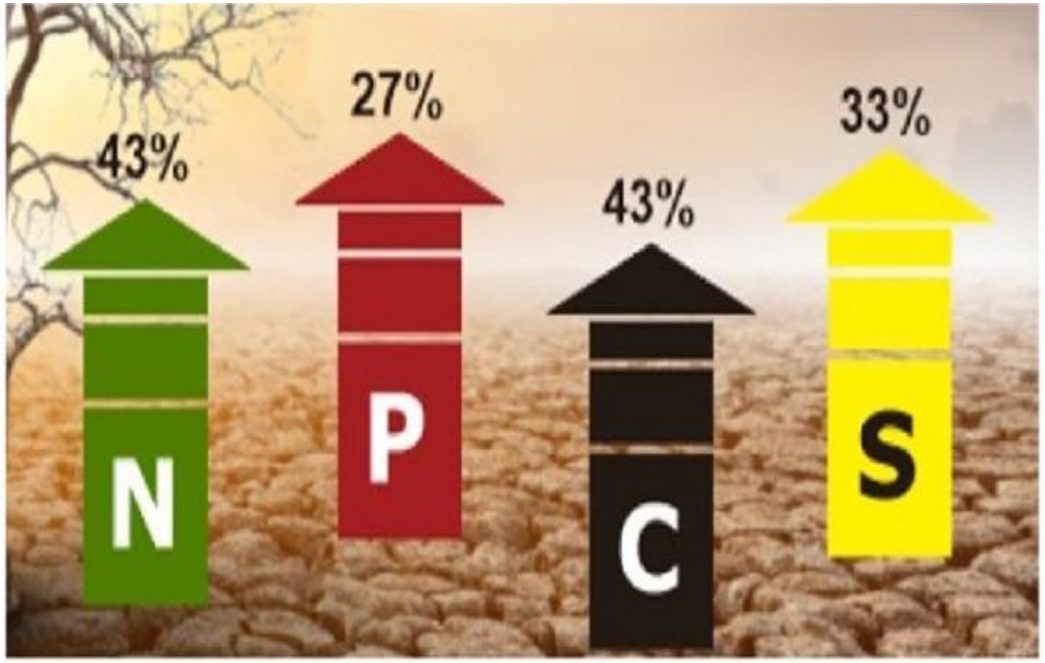
1 **There are 26 element inside the orange**
(It depends on the plants media and its variant of the plants)

2 Harvested & Taken Out :
26 elements

3 Fertilizer are Give/put in:
3 Elements ? N, P, K

I. COAL FERTILIZER

IMBALANCED SOIL HEALTH CONDITION



Sumber : Kopittke, P.M., R.C. Dalal, D. Finn, N.W. Menzies. 2016. Global changes in soil stocks of carbon, nitrogen, phosphorus and sulphur as influenced by long-term agricultural production. Global Change Biologi. https://doi.org/10.1111/gcb.13513.

Put more carbon in soils to meet Paris climate pledges

Take these eight steps to make soils more resilient to drought, produce more food and store emissions, urge **Cornelia Rumpel** and colleagues.

Soils are crucial to managing climate change. They contain two to three times more carbon than the atmosphere. Plants circulate carbon dioxide from the air to soils, and consume about one-third of the CO_2 that humans produce. Of that, about 10–15% ends up in the earth.

Carbon is also essential for soil fertility and agriculture. Decomposing plants, bacteria, fungi and soil fauna, such as earthworms, release organic matter and nutrients for plant growth, including nitrogen and phosphorus. This gives structure to soil, making it resilient to erosion and able to hold water. Typically, organic matter accounts for a few per cent of the mass of soil near the surface.

Increasing the carbon content of the world's soils by just a few parts per thousand (0.4%) each year would remove an amount of CO_2 from the atmosphere equivalent to the fossil-fuel emissions of the European Union[1] (around 3–4 gigatonnes (Gt)). It would also boost soil health: in studies across Africa, Asia and Latin America, increasing soil carbon by 0.4% each year enhanced crop yields by 1.3% (ref. 2).

Yet one-third of the world's soils are degraded[3]. Poor farming practices, industry and urbanization take their toll. Throughout human history, 133 Gt of carbon have been lost from soils, adding almost 500 Gt of CO_2 to the atmosphere[1]. As the amount of organic matter dwindles, soils face mounting damage from erosion, heatwaves and droughts — it is a vicious circle. In the worst cases, nothing can be grown. This is what happened in the 1930s 'dust bowl' in the central southern United States.

Improving soil carbon is now high on the political agenda. In 2015 at the Paris climate summit, France launched the 4p1000 initiative — to promote research and actions globally to increase soil carbon stocks by 4 parts per 1,000 per year. We are members of the scientific and technical committee for this initiative.

In November 2017 at the Bonn

Sumber: Rumpel, C., Amiraslani, F., Koutika, L.-S., Smith, P., Whitehead, D., & Wollenberg, E. (2018). Put more carbon in soils to meet Paris climate pledges. In Nature (Vol. 564, Issue 7734, pp. 32–34). Springer Science and Business Media LLC. https://doi.org/10.1038/d41586-018-07587-4

All started by incomplete fertilizer elements and NO MICRO CARBON

COAL FERTILIZER TECHNOLOGY

IF OUT = IN

1. Fertilizer contains a lot of carbon
2. The nutrients content is **relatively same as plant content**
3. The best Fertilizer should be **from the plant itself**, and must be available in large quantities
4. Can be produced in a short time, large scale and massive at **low cost**
5. **Doesn't change the application habits**

Coal = Fossilized Plants

Nutrients Activation Technology

- ✓ **Step-1 : The cutting process of long carbon chains**
- ✓ **Step-2 : The breaking process of bonds carbon complex, to simplify and "releasing" the nutrients**
- ✓ **Step-3: The activating process of nutrients that had been released so can be used by plants**

CONTENT OF COAL FERTILIZER (CARBONTILIZER)

IAS Laboratories
2515 East University Drive
Phoenix, Arizona 85034
(602) 273-7248
Fax (602) 275-3836

Date Received: September 28, 2020 **Submitted By:** Steve Budiono
Work Order: 20I0338 **Report To:** Budiono Steve
Project: Fertilizer Analysis

Sample Results

Sample Name: 1 Organic Coal Fertilizer
IAS Lab ID: 20I0338-01 (Fertilizer)

	Result	MRL	Units	Method
Nutrients				
Boron (B)	42.55	<0.10	ppm	TMECC
Calcium (Ca)	6.62	<0.12	%	TMECC
Iron (Fe)	11750	<0.10	ppm	TMECC
Magnesium (Mg)	0.09	<5.00	%	TMECC
Manganese (Mn)	149.6	<0.100	ppm	TMECC
Phosphorus (P2O5) - Total	0.0375	<22.9	%	TMECC
Potassium (K2O) - Total	0.046	<5.00	%	TMECC
Sulfur (S)	0.579	<5.00	%	EPA 3050B
Chemical Properties				
Carbon (C) - Total	29.32	<0.001	%	AOAC 993.13
Nitrogen (N) - Total	0.44	<0.001	%	AOAC 993.13
Sodium (Na)	1.41	<5.00	%	TMECC

IAS Laboratories
2515 East University Drive
Phoenix, Arizona 85034
(602) 273-7248
Fax (602) 275-3836

Date Received: September 28, 2020 **Submitted By:** Steve Budiono
Work Order: 20I0338 **Report To:** Budiono Steve
Project: Fertilizer Analysis

Sample Results

Sample Name: 1 Organic Coal Fertilizer
IAS Lab ID: 20I0338-03 (Other)

	Result	MRL	Units	Method
Chemical Properties				
Copper (Cu)	4.20	<0.01	ppm	EPA 3050B
Molybdenum (Mo)	1.70	<0.04	ppm	EPA 3050B
Zinc (Zn)	14.31	<0.10	ppm	EPA 3050B
Metals				
Arsenic (As)	2.35	<0.04	ppm	EPA 3050B
Cadmium (Cd)	0.12	<0.04	ppm	EPA 3050B
Cobalt (Co)	0.50	<0.01	ppm	EPA 3050B
Lead (Pb)	4.55	<0.10	ppm	EPA 3050B
Mercury (Hg)	ND	<0.02	ppm	EPA 6010
Nickel (Ni)	2.82	<0.01	ppm	EPA 3050B
Selenium (Se)	ND	<0.10	ppm	EPA 3050B

Content analysis shows a very complete elements for fertilizer

CONTENT OF COAL FERTILIZER (CARBONTILIZER)

Laporan No. 59648/CNBPAP
Tanggal: 28 Januari 2022

SUCOFINDO

Kantor Penerbit:
Jl. Arteri Tol Cibitung No. 1, Cibitung Bekasi 17520
Telp./Faksimili: 021 88321176/021 88321166
Email: cs.cbt@sucofindo.co.id

LAPORAN ANALISIS

Contoh berikut telah diserahkan dan diidentifikasi oleh pelanggan sebagai berikut :

PELANGGAN	: PT. BURSATANI GLOBAL NIAGA Jl. Agatis Blok F No. 1 Bogor
JENIS CONTOH	: PUPUK FUTURA
TANGGAL DITERIMA	: 14 Januari 2022
TANGGAL ANALISA	: 14 Januari 2022 sampai 26 Januari 2022
ANALISA / PENGUJIAN	: Senyawa Humat
KETERANGAN CONTOH	: Bentuk : Butiran Berat : 850 gram Kemasan : Kantong Plastik Tidak Bersegel 1 (Satu) Sampel
IDENTIFIKASI CONTOH	: FUTURA
REFERENSI	: -

Parameter	Satuan	Hasil	Metode
Senyawa Humat	%	20,33	PO/PK/54

Humic Acid

FORM & APPLICATION METHOD

APPLICATION: SPREAD OR SCATTER

DOSAGE

PACK SIZE: 25 KG/SACK

REDUCE & REPLACE CHEMICAL FERTILIZER 50%

PATENT CERTIFICATE OF COAL FERTILIZER

US010683243B2

(12) **United States Patent**
Saputra

(10) **Patent No.: US 10,683,243 B2**
(45) **Date of Patent: Jun. 16, 2020**

(54) **PROCESS FOR PRODUCING COAL-BASED FERTILIZER AND THE PRODUCTS PRODUCED**

(71) Applicant: **R. Umar Hasan Saputra**, Jakarta (ID)

(72) Inventor: **R. Umar Hasan Saputra**, Jakarta (ID)

(73) Assignee: **R. Umar Hasan Saputra**, Jakarta (ID)

(56) **References Cited**

U.S. PATENT DOCUMENTS

2009/0209423	A1*	8/2009	Slabbekoorn	C05F 5/004 504/101
2013/0090236	A1*	4/2013	Smith	A01N 63/02 504/117
2017/0020132	A1*	1/2017	Erro Garces	A01N 43/16

FOREIGN PATENT DOCUMENTS

CN 101033153 A * 9/2007

II. ESSENTIAL NUTRIENT

ESSENTIAL NUTRIENT TECHNOLOGY (CELLTILIZER)

MAIN INGREDIENTS
(Flour, sugar, butter, egg, etc)

TOOLS

CAKE / PASTRY

- **COAL FERTILIZER**
- **OTHER FERTILIZER**

(macro & micro fertilizer)

CELLTILIZER

- ✓ PLANT CELL AS A TARGET
- ✓ OPTIMIZE CELL PERFORMANCE

YIELD

CELLTILIZER CONTENT

Content

C Organic	±39,83 %
N Total	±6,99 %
P_2O_5	±6,72 %
K_2O	±6,58 %
Zn	±7 ppm
Fe	±2294 ppm
pH	±5,0
Kadar Air	±20 %

Nutrition Facts

Protein	±39,64 %
Carbohydrate	±31,08 %
Total Fat	±0,24 %
Fatty Acids & Amino Acids	

Dosage

Komoditas / *Commodities*	Dosage (Kg / Ha)	Frequency (X)
Padi *(Paddy)*	4 - 6	3 - 4
Jagung *(Maize)*	4 - 6	3 - 4
Kedelai *(Soybean)*	4 - 6	3 - 4
Gandum *(Wheat)*	4 - 6	3 - 4
Singkong *(Cassava)*	4 - 6	3 - 4
Kentang *(Potato)*	4 - 6	3 - 4
Talas *(Yam)*	4 - 6	3 - 4
Sawit *(Palm Oil)*	4 - 6	2 - 3
Tebu *(Sugar Cane)*	4 - 6	3 - 4
Sayuran Buah *(Fruit Vegetable)*	4 - 6	> 4
Sayuran Daun *(Leaf Vegetable)*	4	2 - 3

FORM & APPLICATION METHOD

Each package has 2 compartments which separate **reddish brown powder** and **white powder**. Essential nutrients will immediately formed when the two powders are mixed, therefore it must be sprayed immediately latest in 2 days

Note : Nutrient are only formed when the two substances are mixed together

FORM & APPLICATION METHOD

APPLICATION METHOD:

1. Dosage is 3 tablespoon of each brown and white powder mixed together, then dissolve into enough water.

2. Put the dissolved into the sprayer tanks 15 liter of capacity

3. Spray it all over the plant

PATENT CERTIFICATE OF CELLTILIZER

REPUBLIK INDONESIA
KEMENTERIAN HUKUM DAN HAK ASASI MANUSIA

SERTIFIKAT PATEN

Menteri Hukum dan Hak Asasi Manusia atas nama Negara Republik Indonesia berdasarkan Undang-Undang Nomor 14 Tahun 2001 tentang Paten, memberikan Paten kepada:

Nama dan Alamat Pemegang Paten	:	Ir. R. Umar Hasan Saputra, M.Si. Jl. Bukit Asam Ujung No. 23 RT./RW. 01/06 Kel. Laladon, Kec. Ciomas, Bogor, INDONESIA
untuk Invensi dengan :		
Judul	:	PROSES UNTUK PRODUKSI FORMULA NUTRISI ESENSIAL DAN PRODUK YANG DIHASILKANNYA
Inventor	:	Ir. R. Umar Hasan Saputra, M.Si.
Tanggal Penerimaan	:	19 September 2008
Nomor Paten	:	ID P0031990
Tanggal Pemberian	:	17 Oktober 2012

Perlindungan Paten untuk invensi tersebut diberikan untuk selama 20 tahun terhitung sejak Tanggal Penerimaan (Pasal 8).

Sertifikat Paten ini dilampiri dengan deskripsi, klaim, abstrak dan gambar (jika ada) dari invensi yang tidak terpisahkan dari sertifikat ini.

a.n. MENTERI HUKUM DAN HAK ASASI MANUSIA
DIREKTUR JENDERAL HAK KEKAYAAN INTELEKTUAL
u.b.
Direktur Paten

Corrie Naryati, S.H.
NIP. 195501231984032001

Nama dan Alamat Pemegang Paten	:	Ir. R. Umar Hasan Saputra, M.Si. Jl. Bukit RT./RW. INDONESIA
untuk Invensi dengan :		
Judul	:	PROSES UNTUK PRODUKSI FORMULA NUTRISI ESENSIAL DAN PRODUK YANG DIHASILKANNYA
Inventor	:	Ir. R. Umar Hasan Saputra, M.Si.
Tanggal Penerimaan	:	19 September 2008

FIELD RESULT

FIELD RESULT – BY COMMODITY

PALM FIELD IN CENTRAL & SOUTH KALIMANTAN

NO	FARM	LOCATION	CONTROL (Kg)	SAPUTRA (Kg)	INCREASING (%)
1	Parenggean 1	Kota Waringin Timur, Kalteng	6.813	7.973	17%
2	Pundu	Kota Waringin Timur, Kalteng	3.521	4.564	30%
3	Parenggean 2	Kota Waringin Timur, Kalteng	13.162	13.304	1%
4	Penyang*	Kota Waringin Timur, Kalteng	6.732	6.437	-4%
5	Kota Besi	Kota Waringin Timur, Kalteng	22.718	25.077	10%
6	Kuala Kapuas	Kapuas, Kalteng	16.497	19.091	16%
7	Tumbang Telaken	Gunung Mas, Kalteng	4.620	7.487	62%
8	Muara Teweh	Barito Utara, Kalteng	5.919	7.562	28%
9	Jorong*	Tanah Laut, Kalsel	12.231	11.985	-2%
10	Selunuk	Seruyan, Kalteng	3.456	7.287	111%
11	Tumbang Samba	Katingan, Kalteng	5.705	7.013	23%
12	Marabahan	Barito Kuala, Kalsel	17.247	22.665	31%
AVERAGE					**27%**

*Note: * : Different Soil Condition (Control better than SAPUTRA*

FIELD RESULT- CHILLI

REKAPITULASI PENJUALAN
CABAI MERAH BESAR GH I

PANEN KE-	TANGGAL	URAIAN	Qty	OMZET		HPP		PROFIT KOTOR		
			(KG)	Nilai	Harga Jual/Kg	Nilai	HPP/Kg	Nilai	Profit/Kg	%
1	01 Februari 2023	Panen ke -1	18	Rp 360.000	Rp 20.000	Rp 305.588	Rp 16.977	Rp 54.412	Rp 3.023	15%
2	07 Februari 2023	Panen ke -2	58	Rp 1.450.000	Rp 25.000	Rp 984.672	Rp 16.977	Rp 465.328	Rp 8.023	32%
3	14 Februari 2023	Panen ke -3	90	Rp 2.250.000	Rp 25.000	Rp 1.531.065	Rp 17.012	Rp 718.935	Rp 7.988	32%
4	20 Februari 2023	Panen ke -4	106	Rp 2.862.000	Rp 27.000	Rp 1.803.254	Rp 17.012	Rp 1.058.746	Rp 9.988	37%
5	27 Februari 2023	Panen ke -5	75,5	Rp 2.248.200	Rp 29.777	Rp 1.284.393	Rp 17.012	Rp 963.807	Rp 12.766	43%
6	06 Maret 2023	Panen Ke - 6	26	Rp 650.000	Rp 25.000	Rp 471.198	Rp 18.123	Rp 178.802	Rp 6.877	28%
7	06 Maret 2023	Panen Ke - 7	22	Rp 651.000	Rp 29.591	Rp 399.630	Rp 18.165	Rp 251.370	Rp 11.426	39%
8	20 Maret 2023	Panen Ke - 8	13,6	Rp 476.000	Rp 35.000	Rp 247.710	Rp 18.214	Rp 228.290	Rp 16.786	48%
9	27 Maret 2023	Panen Ke - 9	21,9	Rp 755.500	Rp 34.498	Rp 398.887	Rp 18.214	Rp 356.613	Rp 16.284	47%
10	03 April 2023	Panen Ke - 10	27,8	Rp 916.000	Rp 32.950	Rp 526.143	Rp 18.926	Rp 389.857	Rp 14.024	43%
11	10 April 2023	Panen Ke - 11	40,2	Rp 1.204.500	Rp 30.000	Rp 760.582	Rp 18.944	Rp 443.918	Rp 11.057	37%
12	17 April 2023	Panen Ke - 12	72,5	Rp 2.510.900	Rp 34.633	Rp 1.379.168	Rp 19.023	Rp 1.131.733	Rp 15.610	45%
13	24 April 2023	Panen Ke - 13	91,3	Rp 3.195.500	Rp 35.000	Rp 1.736.800	Rp 19.023	Rp 1.458.700	Rp 15.977	46%
14	01 Mei 2023	Panen Ke - 14	36,0	Rp 864.000	Rp 24.000	Rp 684.828	Rp 19.023	Rp 179.172	Rp 4.977	21%
15	08 Mei 2023	Panen Ke - 15	26,6	Rp 798.000	Rp 30.000	Rp 530.351	Rp 19.938	Rp 267.649	Rp 10.062	34%
16	15 Mei 2023	Panen Ke - 16	15,6	Rp 411.800	Rp 26.397	Rp 311.033	Rp 19.938	Rp 100.767	Rp 6.459	24%
17	22 Mei 2023	Panen Ke - 17	5,8	Rp 139.200	Rp 24.000	Rp 115.640	Rp 19.938	Rp 23.560	Rp 4.062	17%
18	03 Juni 2023	Panen Ke - 18	7,5	Rp 180.000	Rp 24.000	Rp 149.535	Rp 19.938	Rp 30.465	Rp 4.062	17%
19	08 Juni 2023	Panen Ke - 19	13,0	Rp 325.000	Rp 25.000	Rp 271.348	Rp 20.873	Rp 53.652	Rp 4.127	17%
20	13 Juni 2023	Panen Ke - 20	27,0	Rp 675.000	Rp 25.000	Rp 563.570	Rp 20.873	Rp 111.430	Rp 4.127	17%
21	16 Juni 2023	Panen Ke - 21	18	Rp 450.000	Rp 25.000	Rp 375.713	Rp 20.873	Rp 74.287	Rp 4.127	17%
22	19 Juni 2023	Panen Ke - 22	18	Rp 450.000	Rp 25.000	Rp 375.713	Rp 20.873	Rp 74.287	Rp 4.127	17%
23	26 Juni 2023	Panen Ke - 23	37	Rp 925.000	Rp 25.000	Rp 772.299	Rp 20.873	Rp 152.701	Rp 4.127	17%
24	28 Juni 2023	Panen Ke - 24	18	Rp 400.000	Rp 25.000	Rp 375.713	Rp 20.873	Rp 24.287	Rp 1.349	6%
25	03 Juli 2023	Panen Ke - 25	52	Rp 1.137.500	Rp 25.000	Rp 1.085.393	Rp 20.873	Rp 52.107	Rp 1.002	5%
26	10 Juli 2023	Panen Ke - 26	46	Rp 1.150.000	Rp 25.000	Rp 986.930	Rp 21.455	Rp 163.070	Rp 3.545	14%
TOTAL			**983**	**27.435.100**	**27.902**	**18.427.156**	**18.741**	**9.007.944**	**9.161**	**33%**

ECONOMIC ANALYSIS OF CASSAVA

ECONOMIC ANALYSIS OF CASSAVA CULTIVATION USING SAPUTRA TECHNOLOGY
KENANGA SUNGAILIAT, BANGKA

NO	SUBJECT	CONTROL	Saputra Tech + NPK	CONTROL	Saputra Tech + NPK
		IDR		USD (USD = IDR 15500)	
1	PLANTED DATE	10-Jun-21	10-Jun-21	10-Jun-21	10-Jun-21
2	STRAIN	KASESA	KASESA	KASESA	KASESA
3	LAND AREA	3500 M^2	3500 M^2	3500 M^2	3500 M^2
4	HARVESTED DATE	Mar-22	Mar-22	Mar-22	Mar-22
5	**QTY YIELD (KG)**	**5.850**	**11.790**	**5.850,00**	**11.790,00**
6	STARCH LEVEL	29%	29%	29%	29%
7	NET YIELD (KG)	5.324	10.729	5.324	10.729
	% YIELD INCREASED		***102%***		***102%***
	REVENUE (Rp. 1350/KG) - 0,087 USD/Kg	**7.186.725**	**14.484.015**	**463,14**	**933,41**
1	DOSAGE OF CHEM FERTIL -NPK (KG)	300	150	300	150
2	DOSAGE OF COAL FETILIZER (KG)	0	150	0	150
3	CELLTILIZER VEGETATIVE (PK) - 6 pk/Ha	0	2	0	2
4	CELLTILIZER GENERATIVE (BTL)-4 BtL/Ha		2		2
	COST INPUT - FERTILIZER	**3.600.000**	**3.205.000**	**231,00**	**205,56**
	% SAVING OF FERTILIZER		***11%***		***11%***
A	*NPK (Rp 12,000/KG) - usd 0,77*	*3.600.000*	*1.800.000*	*231,00*	*115,50*
B	*Coal Fertilizer (Rp 7,500/Kg - usd 0,48)*		*1.125.000*		*72,00*
C	*Celltilizer Veget(Rp.75,000/Pk-usd 4,84)*		*150.000*		*9,68*
D	*Celltilizer Gene (Rp.65,000/btl-usd 4,19)*	*0*	*130.000*	-	*8,38*
	Manpower - spraying		***400.000***		***26***
	HOK (Rp. 50,000/HOK - 4 ppl/Ha)-usd 3,23		*400.000*		*26*
	PROFIT	**Rp 3.586.725**	**Rp 10.879.015**	**$ 232**	**$ 702**
	% PROFIT		***203%***		***202%***
	ADDITIONAL PROFIT (3500 M^2)		**Rp 7.292.290**		**$ 470**
	ADDITIONAL PROFIT (1 HA)		**Rp 20.835.114**		**$ 1.342**

ECONOMIC ANALYSIS OF PALM OIL

ECONOMIC ANALYSIS OF PALM OIL USING SAPUTRA TECHNOLOGY

NO	SUBJECT	PRICE /KG (USD)-Rp. 15500	CONTROL	SAPUTRA TECHNOLOGY
	DOSAGE FERTILIZER / HA		Chemical Fertilizer 100%	(Chem Fert 50%+ Coal Fert 50%)
1	CHEMICAL FERTILIZER (KG)		500,00	250,00
2	COAL FERTILIZER (KG)		0,00	250,00
	INPUT			
1	CHEMICAL FERTILIZER (NPK)	0,77	387,10	193,55
2	FUTURA - COAL FERTILIZER (KG)	0,48	0,00	120,97
	TOTAL INPUT (Rp)		***387,10***	***314,52***
	COST SAVING			***18,75%***
	QTY OF YIELD / HA (KG)*		*10.000,00*	*10.000,00*
	PRICE FFB / KG*	0,16		
	REVENUE		**1.612,90**	**1.612,90**
	PROFIT / HA (Rp)		**1.225,81**	**1.298,39**
	% PROFIT			**5,92%**
ADDITIONAL PROFIT / HA				**$ 72,58**

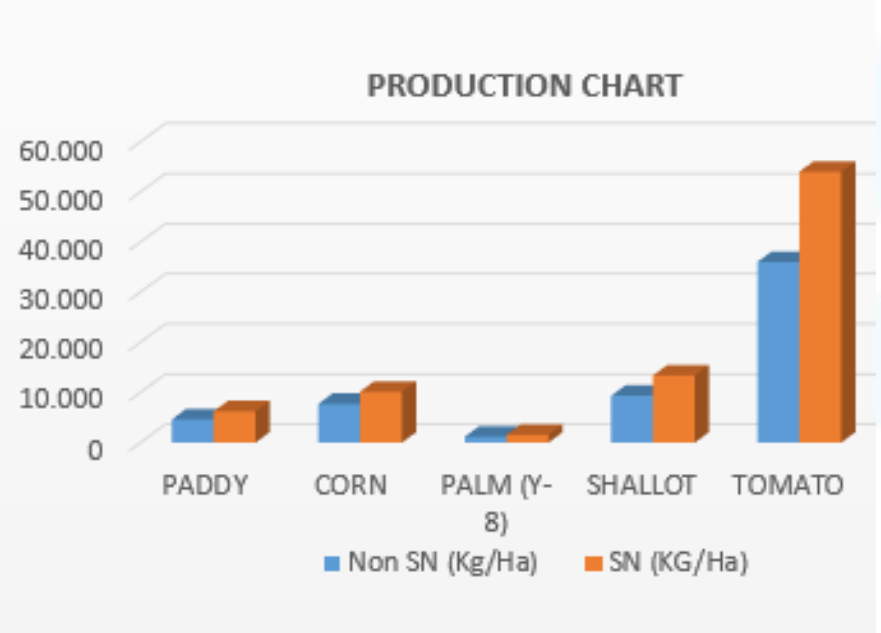
Note: **1. * Number is assumption**

2. Based on our research, there will be increasing yield minimum 10%

FIELD RESULT - SUMMARY

Productivity Increased with SAPUTRA TECHNOLOGY

COMMODITY	w/o SAPUTRA (Kg/Ha)	w/ SAPUTRA (KG/Ha)	% INCREASE
RICE PADDY	4.646	6.254	37,1%
CORN	7.733	10.133	31,03%
PALM (Y-8)	1.184	1.537	29,81%
SHALLOT	9.344	13.342	42,79%
TOMATO	36.000	54.000	50,00%



Benefits using of SAPUTRA TECHNOLOGY on plants, are:

1. Soil more fertile
2. Increases productivity
3. Lower pesticides usage, healthier plants

FIELD RESULT – NIGERIAN SUMMARY

KEY FINDINGS

Nutrient Content: Saputra coal fertilizer contains a balanced profile of essential nutrients, including nitrogen, phosphorus, and potassium, making it a suitable fertilizer option for various crops

Crop Response: The study consistently observed positive responses from maize and cowpea to the application of Saputra coal fertilizer, with significant increases in yield compared to the control and generic fertilizer treatments.

Regional Variations: The optimal application rate of Saputra coal fertilizer varied across different geo-political zones, highlighting the importance of tailoring fertilizer recommendations to specific regional conditions.

Residual effect on soil: Saputra fertilizer adds to the carbon stock of the soil within first year of use, this aids in quick carbon sequestration which is very useful in improving resilience to climate change.

RECOMMENDATIONS

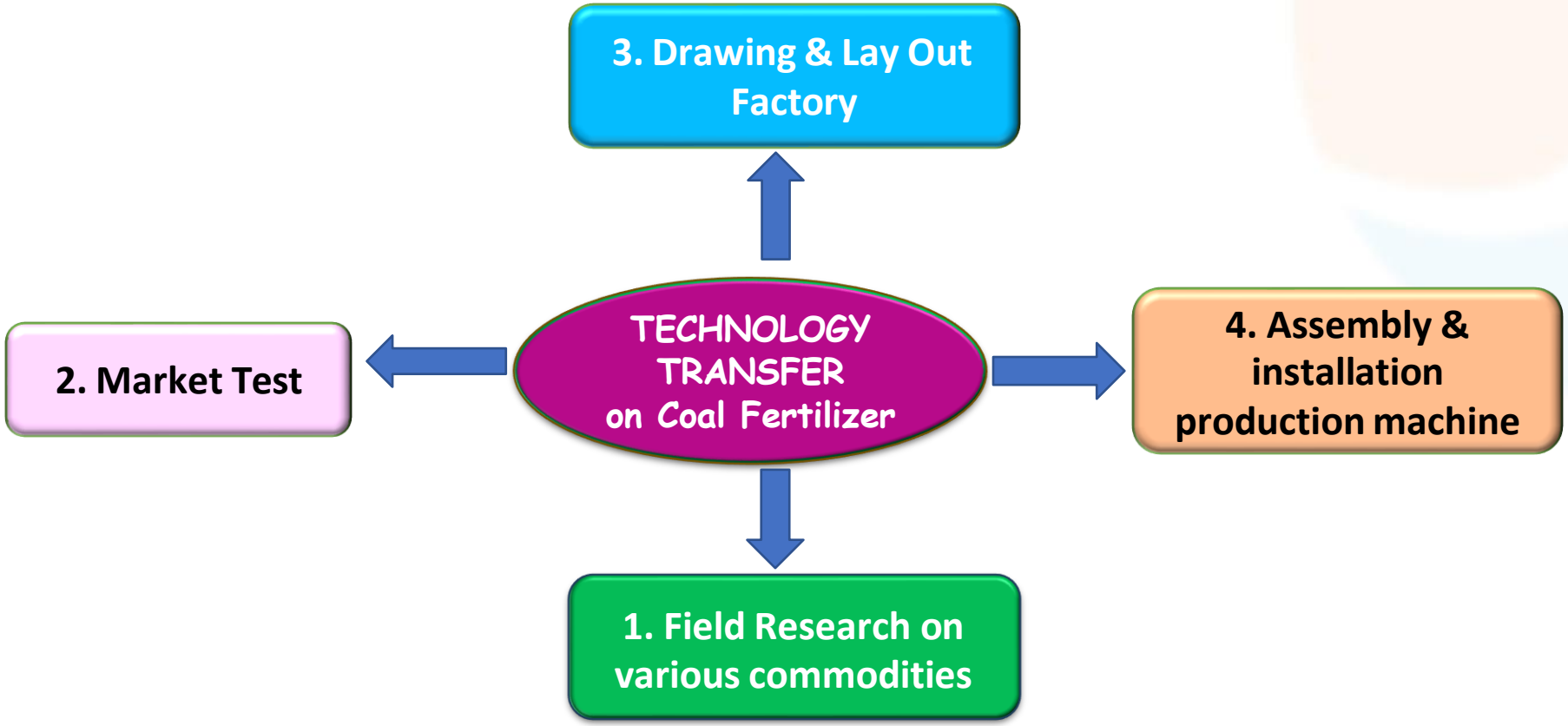
High Nutrient-Demanding Crops (Maize, Rice, etc): A 50:50 mixture of Saputra coal fertilizer and NPK is the optimal application rate for maximizing yield across all agro-ecological zones.

Low Nutrient-Demanding Crops (Cowpea, Okra, vegetables etc): A 75:25 mixture of Saputra coal fertilizer and NPK is suitable for these crops.

All Fertilizer Recommendations should follow the guidelines of Federal Fertilizer Department (FFD 2012) for all agro-ecological zones

At all times, Saputra and NPK should be applied at planting and urea may be top dressed if necessary

BUSINESS MODEL



Except Activator:

MUST IMPORT FROM INDONESIA

OURACHIEVEMENT

MAY 2025
Signing the license agreement with Gypsum Plus Mines Limited, United Republic of Tanzania

NOV 2024
Signing the license agreement with Gypsum Plus Mines Limited, United Republic of Tanzania

OKT 2024
Signing the license agreement with Barcon Engineering, Ethiopia

OKT 2024
Signing the license agreement with K.K Luimbe Limited, Angola

SEP 2024
Signing the license agreement with Atatu Private Limited, South Africa

MAR 2024
Building the factory and Technology Transfer in Zimbabwe

SEP 2024
Signing the license agreement with Liberia

MAR 2024
Exported Saputra products to Gaborone, Botswana

AUG 2024
Signing the license agreement with TRUCOM (Pty) Ltd;
Groundbreaking of the factory to start in early 2025, Botswana

JAN 2024
Exported Saputra products to Nairobi,Kenya

APR 2024
Started the Technology Transfer with NASENI in Padang

DEC 2023
Signed the Agreement of Technology Transfer with NASENI in Nigeria

OCT 2023
Signed the Agreement of Technology Transfer with FOODTECH Private Ltd (Zimbabwe) and GLOGENS (USA)

JUN 2020
Got our patent from US PTO

TECHNOLOGY TRANSFER (Zimbabwe & Nigeria)





“Farming Innovatively Benefits All Stakeholder and Promotes Environmental Sustainability and Food Security “

Thank you

Appointed distributor in Cameroon:

Seune Integrated Concepts Ltd

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