



### Perkembangan Beban Produksi Bio Farma 2017-2021

Table of Development of Bio Farma's Production Costs in 2017-2021

Realisasi Beban Produksi	Satuan Unit	2017	2018	2019	2020	2021	Realization of Production Costs
Beban Produksi Vaksin Virus	Rp Miliar Rp Billion	532,84	426,87	681,44	629,64	14.264,58	Production Cost of Viral Vaccine
Pertumbuhan	%	0,62%	(19,89%)	59,64%	(7,60%)	2.165,52%	Growth
Beban Produksi Vaksin Bakteri	Rp Miliar Rp Billion	215,05	59,64	275,52	271,30	185,32	Production Cost of Bacterial Vaccine
Pertumbuhan	%	(9,23%)	24,02%	3,31%	(1,53%)	(31,69%)	Growth
Beban Produksi Vaksin Kombinasi	Rp Miliar Rp Billion	205,28	307,89	215,19	21,72	264,40	Production Cost of Combination Vaccine
Pertumbuhan	%	38,01%	49,99%	(30,11%)	(89,91%)	1.117,57%	Growth
Beban Produksi Sera	Rp Miliar Rp Billion	58,57	23,42	39,53	177,98	202,30	Production Cost of Sera
Pertumbuhan	%	53,08%	(89,91%)	68,79%	350,23%	13,67%	Growth
Beban Produksi Biosimilar	Rp Miliar Rp Billion	-	-	-	-	8,63	Production Cost of Biosimilar
Pertumbuhan	%	-	-	-	-	0%	Growth
Beban Produksi Partnership	Rp Miliar Rp Billion	713,27	809,32	337,52	948,81	9.760,57	Production Cost of Partnership Products
Pertumbuhan	%	809,32	13,47%	(58,30%)	181,11%	928,72%	Growth
Total Beban Produksi	Rp Miliar Rp Billion	1.725,01	1.834,20	1.549,20	2.049,43	24.685,80	Production Costs
Pertumbuhan	%	47,19%	6,33%	(15,54%)	32,29%	1.104,52%	Growth

## PEMASARAN

Nilai realisasi pemasaran Bio Farma di tahun 2021 meningkat 986,74% menjadi sebesar Rp30.320,45 miliar dari senilai Rp2.790,04 miliar di tahun sebelumnya. Nilai penjualan produk-produk perusahaan tetap mendominasi dengan kontribusi hingga 58,53% dari nilai total penjualan di tahun 2021.

## MARKETING

Bio Farma's marketing realization in 2021 was Rp30,320.45 billion, which increased by 986.74% from Rp2,790.04 billion in the previous year. The Company's product sales continued to dominate, contributing 58.53% of the total sales in 2021.

### Nilai Penjualan Bio Farma Menurut Kelompok Produk tahun 2017-2021

Table of Bio Farma's Sales by Product Group in 2017-2021

Realisasi Beban Produksi	Satuan Unit	2017	2018	2019	2020	2021	Marketing by Product Group
<b>Produk Perusahaan</b>							<b>Company Products</b>
Vaksin Virus	Rp Miliar Rp Billion	1.290,96	1.193,81	1.526,15	1.287,59	16.785,85	Virus Vaccines
Vaksin Bakteri	Rp Miliar Rp Billion	186,82	229,32	189,58	157,14	115,95	Bacterial Vaccines
Vaksin Kombinasi	Rp Miliar Rp Billion	318,58	536,57	272,51	218,84	318,51	Combination Vaccines
Sera & Diagnostik	Rp Miliar Rp Billion	75,75	78,33	71,61	482,49	523,52	Sera & Diagnostics

Realisasi Beban Produksi	Satuan Unit	2017	2018	2019	2020	2021	Marketing by Product Group
Biosimilar	Rp Miliar Rp Billion	-	-	-	-	2,04	Biosimilar
Subtotal Produk Perusahaan	Rp Miliar Rp Billion	1.872,11	2.038,04	2.059,84	2.146,06	17.745,87	Sub-total of Company Products
Pertumbuhan	%	(2,88%)	8,86%	1,07%	4,19%	726,90%	Growth
<b>Produk Partnership</b>	Rp Miliar Rp Billion	1.111,03	1.133,98	456,54	477,50	10.469,36	<b>Partnership Products</b>
Pertumbuhan	%	209,52%	2,07%	(59,74%)	4,59%	2.092,54%	Growth
<b>Trading Partnership</b>	Rp Miliar Rp Billion	20,12	53,11	14,59	104,00	1.704,05	<b>Trading Partnerships</b>
Pertumbuhan	%	(15,33%)	163,97%	(72,52%)	612,66%	1.538,51%	Growth
<b>Jasa Layanan Klinik &amp; Imunisasi</b>	Rp Miliar Rp Billion	8,31	10,10	11,62	17,83	12,34	<b>Clinical &amp; Immunization Services</b>
Pertumbuhan	%	56,35%	21,59%	14,98%	53,42%	(30,78%)	Growth
<b>Jasa Layanan Distribusi</b>	Rp Miliar Rp Billion	-	-	-	44,66	388,83	<b>Distribution Services</b>
Pertumbuhan	Rp Miliar Rp Billion	-	-	-	-	770,69%	Growth
<b>Total Realisasi Pemasaran</b>	Rp Miliar Rp Billion	3.011,57	3.235,23	2.542,59	2.790,04	30.320,45	<b>Total Marketing Realization</b>
Pertumbuhan	%	30,05%	7,43%	(21,41%)	9,73%	986,74%	Growth

Sebagaimana tampak dalam tabel tersebut di atas, peningkatan nilai penjualan sebesar Rp27.530,41 miliar atau kenaikan nilai sebesar 986,74% menjadi senilai Rp30.320,45 miliar tersebut dikontribusikan oleh masing-masing kelompok produksi sebagai berikut:

- Produk Perusahaan.**  
Penjualan produk perusahaan naik 726,90% atau senilai Rp15.599,81 miliar karena realisasi penjualan vaksin virus naik sebesar 1.203,66% atau senilai Rp15.498,26 miliar. Lebih lanjut lagi, peningkatan ini dikontribusikan oleh adanya realisasi penjualan vaksin kombinasi, sera dan diagnostik, serta biosimilar.
- Produk Partnership**  
Penjualan produk Partnership meningkat 2.092,54% atau bertambah senilai Rp9.991,86 miliar.
- Trading Partnership**  
Penjualan trading Partnership di tahun 2021 naik 1.538,51% atau bertambah Rp1.600,05 miliar menjadi sebesar Rp1.704,05 miliar dari senilai Rp104,00 miliar di tahun sebelumnya.
- Jasa Layanan Klinik dan Imunisasi**  
Penjualan Jasa Layanan Klinik dan Imunisasi turun -30,78 % atau berkurang menjadi sebesar Rp12,34 miliar dari Rp17,83 miliar.

As shown in Table above, the increase in sales by Rp27,530.41 billion or 986,74% to Rp30,320.45 billion was contributed to by each production group as follows:

- Company Products**  
Sales of the Company's products increased by 726.90% or Rp15,599.81 billion, by 1,203.66% or Rp15,498.26 billion. Furthermore, the increase in derived by realization of combination Vaccines, sera and diagnostic, and biosimilar
- Partnership Products**  
Sales of partnership products increased by 2,092.54%, or Rp9,991.86 billion.
- Trading Partnership**  
Sales of trading partnerships in 2021 increased by 1,538.51% or Rp1,600.05 billion to Rp1,704.05 billion from Rp104.00 billion in the previous year.
- Clinical and Immunization Services**  
Clinical and Immunization Services sales decreased by -30.78 % to Rp12.34 billion from Rp17.83 billion in the previous year.



## 5. Jasa Distribusi

Realisasi Jasa Distribusi senilai Rp388,83 miliar yang merupakan nilai penjualan di sektor Pemerintah, Swasta dan Ekspor merupakan catatan kinerja hasil perhitungan yang merujuk pada PSAK 72.

Sementara itu, jika merujuk pada hasil penjualan menurut sektor pasar tujuan pemasaran produk, penjualan kepada Pemerintah tetap mendominasi, diikuti dengan realisasi penjualan ke pasar ekspor kemudian penjualan kepada pasar sektor swasta, sebagaimana disajikan pada tabel berikut.

## 5. Distribution Services

The realization of Distribution Services was Rp388.83 billion, derived from the sales in the Government, Private, and Export sectors. Presentation of the realization of Distribution Services in the Financial statements refers to PSAK 72.

Meanwhile, when referring to sales by market sector and for each product marketing target, sales to the Government dominated, followed by sales realization to export markets and sales to private sector markets, as presented in the following table.

### Penjualan Produk Bio Farma Menurut Sektor tahun 2017-2021

Table of Bio Farma's Sales of Products by Sector in 2017-2021

Sektor Konsumen	Satuan	2017	2018	2019	2020	2021	Consumer Sector
<b>Produk Perusahaan</b>							<b>Company's Product</b>
Pemerintah	Rp Miliar Rp Billion	1.359,28	1.859,15	831,94	1.007,34	27.346,8	Government
Pertumbuhan	Rp Miliar Rp Billion	99,49%	36,77%	(55,25%)	21,08%	2.614,75%	Growth
Swasta	Rp Miliar Rp Billion	409,38	298,01	234,86	741,43	1.114,07	Private
Pertumbuhan	Rp Miliar Rp Billion	6,05%	(27,20%)	(21,19%)	215,69%	50,26%	Growth
Ekspor	Rp Miliar Rp Billion	1.242,91	1.078,06	1.475,80	996,61	1.470,75	Export
Pertumbuhan	%	(0,44%)	(13,21%)	36,89%	(32,47%)	47,58%	Growth
Jasa Distribusi	Rp Miliar Rp Billion				44,66	388,83	Distribution Service
Pertumbuhan						770,69%	Growth
Total	Rp Miliar Rp Billion	3.011,57	3.235,23	2.542,59	2.790,04	30.320,45	Total
Pertumbuhan	%	30,05%	7,43%	(21,41%)	9,73%	986,74%	Growth

### 1. Realisasi Penjualan Kepada Sektor Pemerintah

a. Realisasi penjualan sektor pemerintah tahun 2021 mencapai 2.541,11% atau senilai Rp27,35 triliun dibandingkan dengan RKAP Tahun 2021 dikarenakan adanya realisasi penjualan vaksin COVID-19 yang sebelumnya tidak dianggarkan.

b. Dibandingkan dengan periode yang sama tahun lalu naik sebesar 2.614,75% atau senilai Rp26,34 triliun terutama karena adanya realisasi penjualan vaksin penugasan Pemerintah yaitu vaksin COVID.19-BF, Corona-Vac dan COVID-19 Astrazenica masing-masing senilai Rp15,15 triliun, Rp9,97 triliun dan Rp831,02 miliar.

### 1. Realization of Sales to the Government Sector

a. Realization of government sector sales in 2021 reached 2,541.11% or Rp. 27.35 trillion compared to the 2021 RKAP due to the realization of sales of COVID-19 vaccines which were not previously budgeted.

b. Compared to the same period last year, it increased by 2,614.75% or Rp. 26.34 trillion, mainly due to the realization of sales of vaccines assigned by the Government, which are the COVID.19-BF, Corona-Vac and COVID-19 Astrazeneca vaccines, each valued at Rp. 15.15 trillion, Rp9.97 trillion and Rp831.02 billion.



## 2. Realisasi Penjualan Sektor Swasta

a. Dibandingkan dengan RKAP Tahun 2021, penjualan sektor swasta mencapai 137,51% atau senilai Rp1,11 triliun terutama adanya realisasi penjualan COVID-19 vaccine Sinopharm (vaksin gotong royong/VGR) dan HPV Gardasil masing-masing senilai Rp825,39 miliar dan Rp22,35 miliar.

b. Dibandingkan dengan Tahun 2020, naik sebesar 50,26% atau senilai Rp372,64 miliar terutama dikarenakan adanya realisasi penjualan COVID-19 vaccine Sinopharm (vaksin gotong royong/VGR) dan HPV Gardasil masing-masing senilai Rp825,39 miliar dan Rp22,35 miliar.

## 3. Realisasi Penjualan Ekspor

a. Dibandingkan dengan RKAP Tahun 2021, penjualan sektor ekspor mencapai 77,85% atau senilai Rp1,47 triliun, terutama karena:

- Pencapaian penjualan Produk Jadi mencapai Rp692,06 miliar terutama dikarenakan pencapaian penjualan bOPV 20 ds, Campak 10 ds, dan nOPV2 50 ds masing-masing senilai Rp47,64 miliar, Rp70,18 miliar dan Rp338,18 miliar
- Pencapaian penjualan Bulk mencapai Rp778,70 miliar terutama dikarenakan adanya pembatalan penjualan Bulk Campak dari Biological E India.

b. Dibandingkan dengan tahun 2020, penjualan sektor ekspor naik sebesar 47,58% atau senilai Rp518,91 miliar dikarenakan adanya kenaikan realisasi penjualan nOPV2 50 ds dan Bulk Polio masing-masing naik senilai Rp299,39 miliar dan Rp159,64 miliar serta adanya realisasi penjualan bulk nOPV2 senilai Rp178,23 miliar dimana sebelumnya tidak ada realisasi penjualan.

## 4. Realisasi Jasa Distribusi

Sesuai dengan penerapan PSAK 72 bahwa penyajian penjualan atas produk dan jasa dilakukan secara terpisah. Hal tersebut memberikan dampak ke masing-masing sektor penjualan sehingga penyajiannya adalah sebagai berikut:

a. Total penjualan produk dan jasa ke sektor pemerintah adalah sebesar Rp 27,62 triliun terdiri dari penjualan atas produk sebesar Rp 27,35 triliun dan jasa distribusi sebesar Rp 271,08 miliar.

b. Total penjualan produk dan jasa ke sektor swasta adalah sebesar Rp 1,17 triliun terdiri dari penjualan atas produk sebesar Rp 1,11 triliun dan jasa distribusi sebesar Rp 55,80 miliar.

## 2. Realization of Sales to the Private Sector

a. Compared to the 2021 Annual Work Plan and Budget, private sector sales reached 137.51% or Rp. 1.11 trillion, especially due to the realization of sales of the COVID-19 vaccine Sinopharm (Gotong Royong Vaccines/VGR) and HPV Gardasil worth Rp. 825.39 billion and Rp22.35 billion.

b. Compared to 2020, there was an increase of 50.26% or Rp. 372.6 billion mainly derived from the realization of Sinopharm COVID-19 Vaccines sales (Gotong Royong Vaccines/VGR) and HPV Gardasil worth Rp. 825.39 billion and Rp22.35 billion respectively.

## 3. Realization of Export Sales

a. Compared to the 2021 Annual Work Plan and Budget, export sector sales reached 77.85% or Rp1.47 trillion, mainly due to:

- Sales of finished products, which reached Rp692.06 billion, mainly due to sales of bOPV 20 ds, Measles 10 ds, and nOPV2 50 ds valued at Rp47.64 billion, Rp70.18 billion and Rp338.18 billion respectively.
- Bulk sales reached Rp778.70 billion, mainly due to the cancellation of Bulk Measles sales from Biological E India.

b. Compared to 2020, export sector sales increased by 47.58% or Rp518.91 billion due to an increase in sales realization of nOPV2 50 ds and Bulk Polio an increase of Rp299.39 billion and Rp. 159.64 billion respectively, as well as the realization of bulk sales of nOPV2 worth Rp. 178.23 billion, where previously there was no sales realization.

## 4. Realization of Service Distribution in 2021:

According to PSAK 72 Implementation regarding the sales of product and services presented separately. It impacts each sector sales in term of presentation as follows :

a. Total sales of product and services in government sector is Rp 27.62 trillion consists of products sales Rp 27.35 trillion and distribution services Rp 271.08 billion.

b. Total sales of product and services in public sector is Rp 1.17 trillion consists of product sales Rp 1.11 trillion and distribution services Rp 55.80 billion.



- c. Total penjualan produk dan jasa ke sektor ekspor adalah sebesar Rp 1,53 triliun terdiri dari penjualan atas produk sebesar Rp 1,47 triliun dan jasa distribusi sebesar Rp 61,96 miliar.

### PROGRAM PEMASARAN

Sebagai wujud dalam menjaga stabilitas dan kualitas penjualan produk-produk unggulan, Bio Farma mencanangkan ragam program pemasaran untuk memperkuat STP Perusahaan sesuai dengan sektor pasar yang dituju, sebagai berikut:

#### 1. Pemasaran dan Penjualan Domestik

Beragam program pemasaran sebanyak 50 lebih program telah direalisasikan oleh Bio Farma untuk mempertahankan volume maupun penjualan di pasar domestik. Realisasi beragam program tersebut membuat Bio Farma mencatatkan penambahan jumlah pelanggan sektor swasta melalui marketer, yaitu 1.984 pelanggan atau senilai 10,25%.

Berikut program-program pemasaran yang dilaksanakan Bio Farma di pasar domestik:

- a. Mengikuti proses pengadaan di Kemenkes dan LKPP
- b. *Meeting* koordinasi dengan Kemenkes terkait rencana kebutuhan vaksin Program Nasional
- c. Kontrak pengadaan vaksin Nasional dengan Kemenkes dan LKPP
- d. Distribusi Vaksin program Nasional sesuai alokasi
- e. Kegiatan *monitoring* kualitas vaksin ke seluruh Dinas Kesehatan Provinsi
- f. Mengikuti proses penugasan pengadaan dan distribusi vaksin COVID-19
- g. Kegiatan monitoring kualitas vaksin ke seluruh Dinas Kesehatan Provinsi dan Hub
- h. *Meeting* koordinasi dengan seluruh *stakeholder* yang terlibat, terkait rencana kebutuhan vaksin COVID-19 tahun 2022
- i. Kontrak penugasan pengadaan vaksin COVID-19 dan kontrak distribusi vaksin COVID-19 dengan Kementerian Kesehatan RI
- j. Distribusi Vaksin COVID-19 sesuai alokasi
- k. Penetapan program diskon khusus, *bundling*, konsinyasi, *compliment* produk, penawaran program eksklusif, dan evaluasi harga pokok produksi untuk mengoptimalkan produk dengan ED pendek dan *slow moving* agar terserap pasar

- c. Total sales of product and services in export sector is Rp 1.53 trillion consists of product sales Rp 1.47 trillion and distribution services Rp 61.96 billion.

### MARKETING PROGRAMS

To maintain the stability and quality of superior product sales, Bio Farma has launched various marketing programs to strengthen the Company's STP in accordance with the targeted market sector, as follows:

#### 1. Domestic Marketing and Sales

More than 50 programs have been realized by Bio Farma in maintaining the volume of domestic market sales. Bio Farma has recorded 1.984 private customers or 10.25% contribution through the realization of marketing programs.

Bio Farma has conducted several marketing programs in the domestic market, including:

- a. Follow the procurement process at the Ministry of Health and National Public Procurement Agency
- b. Coordination meeting with the Ministry of Health regarding the plan for the National Program vaccine needs
- c. National vaccine procurement contract with the Ministry of Health and National Public Procurement Agency
- d. Distribution of National program Vaccines according to the allocation
- e. Vaccine quality monitoring activities throughout the Provincial Health Office
- f. Following the assignment process for the procurement and distribution of COVID-19 vaccines
- g. Vaccine quality monitoring activities throughout the Provincial Health Office and Hub
- h. Coordination meeting with all stakeholders involved, related to the planned fulfillment of the need for the COVID-19 vaccine in 2022
- i. Contract for the procurement of the COVID-19 vaccine and the distribution contract for the COVID-19 vaccine with the Indonesian Ministry of Health
- j. Distribution of COVID-19 Vaccine according to allocation
- k. Determination of special discount programs, bundling, consignment, product compliments, exclusive program offers, and evaluation of the cost of production to optimize products with short and slow moving EDs to be absorbed by the market



- l. Alignment intensif dengan *stakeholder* terkait untuk percepatan ketersediaan produk, sebagai bentuk optimalisasi produk dengan kondisi *out of stock*
  - m. Finalisasi Kerjasama pemasaran produk baru Bio Farma Bersama *stakeholder* terkait serta koordinasi untuk menjamin rilis produk tepat waktu
  - n. Menambah chanel penjualan dengan mengajukan negosiasi ulang produk di e-katalog, mengajukan produk baru agar masuk ke dalam e-katalog, serta ikut serta dalam program formularium Rumah Sakit dan jejaring Imunicare
  - o. Mengembangkan dan menyempurnakan program Vaksin Gotong Royong (VGR) dengan cara membentuk tim SDM yang memadai untuk percepatan proses bisnis VGR, serta mengoptimalkan *customer* baru dari program VGR untuk penyerapan produk perusahaan (Bio Farma) lainnya
  - p. Melakukan *monitoring* lapangan (regional) sebagai bentuk peningkatan distributor *competency*
  - q. Menambah *sales marketer* di daerah potensial, melakukan *training product knowledge* dan *training* peningkatan *skills* sebagai bentuk pengembangan tenaga *marketer*
  - r. Program *customer gathering* (Distributor *meeting*, *monitoring* produk dan *event marketing*) dan *loyalty price* program sebagai bentuk usaha membangun loyalitas dan pertumbuhan *end customer*
  - s. Berkolaborasi dengan Asosiasi maupun *customer pareto* untuk meningkatkan *customer engagement* dan penyerapan produk, sebagai bentuk usaha *me-maintain* konsumen dalam rangka optimalisasi produk Bio Farma
  - t. Evaluasi berkala performa *distributor existing*, penyempurnaan mekanisme *distributorship* dan program *Distributor Championship* dalam rangka pengembangan distributor
- l. Intensive alignment with relevant stakeholders to accelerate product availability, as a form of product optimization with out of stock conditions
  - m. Finalization of Bio Farma's new product marketing collaboration with relevant stakeholders and coordination to ensure timely product release
  - n. Adding sales channels by submitting product renegotiations in the e-catalog, submitting new products to be included in the e-catalog, as well as participating in the Hospital formulary program and the Imunicare network
  - o. Develop and improve the Gotong Royong Vaccine (VGR) program by forming an adequate HR team to accelerate the VGR business process, as well as optimizing new customers from the VGR program for absorption of other company products (Bio Farma)
  - p. Conducting field monitoring (regional) as a form of increasing distributor competency
  - q. Hiring sales marketers in potential areas, conducting product knowledge training and skills improvement training as a form of developing marketers
  - r. Customer gathering programs (Distributor meetings, product monitoring and event marketing) and loyalty price programs as an effort to build loyalty and growth of end customer
  - s. Collaborating with Associations and Pareto customers to increase customer engagement and product absorption, as a form of effort to maintain consumers in order to optimize Bio Farma product
  - t. Periodic evaluation of existing distributor performance, improvement of distributorship mechanism and Distributor Championship program in order to develop distributors
2. Pemasaran dan Penjualan Internasional  
Bio Farma merealisasikan tidak kurang dari 12 program pemasaran untuk memenuhi target penjualan produk-produk di pasar ekspor, antara lain:
    - a. Komunikasi intensif dengan *customer* untuk menjaga dan meningkatkan *relationship* melalui *e-mail*, telepon, *teleconference*, *face to face meeting* (setelah kondisi normal)
    - b. Peningkatan kompetensi personil Divisi PPI melalui *online training* dan *workshop*
2. International Marketing and Sales  
To meet the product sales target in the export market, Bio Farma realized no less than 12 marketing programs, including:
    - a. Intensive communication with customers to maintain and improve relationships via email, telephone, teleconference, face to face meeting (after normal conditions)
    - b. Improving the competence of PPI Division personnel through online training and workshops



- c. Membuat analisa pasar dalam rangka perluasan pasar internasional
  - d. Meningkatkan hubungan baik dengan lembaga/instansi nasional maupun internasional terkait dengan perluasan ekspor, seperti Kemenlu RI, Kemenkes RI, KBRI, *Embassy*.
  - e. Mencari potensi atau kesempatan pemasaran dan/atau bisnis internasional, baik secara jangka pendek, menengah maupun jangka panjang
3. *Regulatory Affair* dan Komunikasi Pemasaran dan Distribusi
- Pada area ini, Bio Farma merealisasikan 35 program kegiatan, mencakup di antaranya:
- a. Melakukan registrasi produk biofarma baik di Indonesia maupun di negara tujuan ekspor, dan juga produk *Partnership* di Indonesia sehingga memperoleh 39 izin edar selama tahun 2021.

- c. Create market analysis in the context of international market expansion
  - d. Improve good relations with national and international institutions/agencies related to export expansion, such as the Indonesian Ministry of Foreign Affairs, the Indonesian Ministry of Health, and the Indonesian Embassy
  - e. Finding business potential or international marketing and/or business opportunities, both in the short, medium and long term
3. Regulatory Affairs, Marketing Communication, and Distribution
- In this area, Bio Farma has realized 35 programs, as follows:
- a. Registering Bio Farma products in Indonesia and in export destination countries, as well as partnership products in Indonesia and obtaining 39 distribution licenses during 2021.

<b>Nama Produk</b> Product Name	<b>Pabrikan</b> Manufacturer	<b>Negara tempat produk terdaftar</b> Country where the product is registered	<b>Nomor dan Tanggal Persetujuan</b> Number and Approval Date
Coronavac (Dus, 40 vial @ 0.5 mL (1 ds)) Coronavac (Box, 40 vials @ 0.5 mL (1 ds))	Sinovac Life Sciences Co., Ltd, China (Tianfu site)	Indonesia	EUA2057300143A1, 11-Jan-2021 11 January 2021
COVID-19 Vaccine (Dus, 10 vial @ 5 mL (10 ds)) COVID-19 Vaccine (Box, 10 vials @ 5 mL (10 ds))	PT Bio Farma (Persero), Indonesia	Indonesia	EUA2102907543A1, 16-Feb-2021 16 February 2021
COVID-19 Vaccine AstraZeneca (Dus, 10 vial @ 5 ml (10 ds)) COVID-19 Vaccine AstraZeneca (Box, 10 vials @ 5 ml (10 ds))	SK Bioscience co., Ltd, Korea	Indonesia	EUA2158100143A1, 22-Feb-2021 22 February 2021
Vaksin Jerap Td (Dus, 10 vial @ 10 ds) Adsorbed Td Vaccine (Box, 10 vials @ 10 ds)	PT Bio Farma (Persero), Indonesia	Gulf Cooperation Council	GRD/572/001/20, 06-Des-2020 (email diterima Bio Farma pada tanggal 24 Jan 2021 GRD/572/001/20, 6 December 2020 (email was received by Bio Farma on 24 January 2021)
bOPV Tipe 1 dan 3 (Dus, 50 vial @ 20 ds) bOPV Type 1 and 3 (Box, 50 vials @ 20 ds)	PT Bio Farma (Persero), Indonesia	Egypt	EGY/BP/Aug.2015/0088/01, 17-Aug- 2020 (email diterima Bio Farma pada tanggal 21- Jan-2021) EGY/BP/Aug.2015/0088/01, 17 August 2020 (email was received by Bio Farma on 21 January 2021)
bOPV Tipe 1 dan 3 (Dus, 50 vial @ 20 ds) bOPV Type 1 and 3 (Box, 50 vials @ 20 ds)	PT Bio Farma (Persero), Indonesia	Gulf Cooperation Council	GRD/572/001/20, 06-Des-2020 (email diterima Bio Farma pada tanggal 24- Jan-2021) GRD/572/001/20, 6 December 2020 (email was received by Bio Farma on 24 January 2021)



Nama Produk Product Name	Pabrikan Manufacturer	Negara tempat produk terdaftar Country where the product is registered	Nomor dan Tanggal Persetujuan Number and Approval Date
BioSaliva	PT Bio Farma (Persero), Indonesia	Indonesia	KEMENKES RI AKD 10302120673, 1-Apr-2021 MINISTRY OF HEALTH OF RI AKD 10302120673, 1 April 2021
Bio Liv Gamma SN (Dus, 1 vial @ 50 mL) Bio Liv Gamma SN (Box, 1 vial @ 50 mL)	SK PLASMA, CO., LTD., ANDONG-SI, Korea Selatan	Indonesia	DKL2155300243A1, 1-Apr-2021 1 April 2021
Bio Liv Gamma SN (Dus, 1 vial @ 100 mL) Bio Liv Gamma SN (Box, 1 vial @ 100 mL)	SK PLASMA, CO., LTD., ANDONG-SI, Korea Selatan	Indonesia	DKL2155300243A1, 1-Apr-2021 1 April 2021
Enoxaparin Sodium (Dus, 2 prefilled syringe @ 0,4 mL + 2 needles) Enoxaparin Sodium (Box, 2 prefilled syringe @ 0.4 mL + 2 needles)	PT Bio Farma (Persero), Indonesia	Indonesia	GKL2102907743A1, 05-Apr-2021 5 April 2021
Enoxaparin Sodium 0.6 mL (Dus, 2 prefilled syringe @ 0,6 mL + 2 needles) Enoxaparin Sodium 0.6 mL (Box, 2 prefilled syringe @ 0.6 mL + 2 needles)	PT Bio Farma (Persero), Indonesia	Indonesia	GKL2102907743A1, 05-Apr-2021 5 April 2021
Enoxaparin Sodium 1.0 mL (Dus, 2 prefilled syringe @ 1 mL + 2 needles) Enoxaparin Sodium 1.0 mL (Box, 2 prefilled syringe @ 1 mL + 2 needles)	PT Bio Farma (Persero), Indonesia	Indonesia	GKL2102907743A1, 05-Apr-2021 5 April 2021
Vaksin TT (Dus, 10 vial @ 10 ds (5 mL)) TT Vaccine (Box, 10 vials @ 10 ds (5 mL))	PT Bio Farma (Persero), Indonesia	Ukraine	UA/18674/01/01, 13-Apr-2021 13 April 2021
Antiten-A (0,4 mL) (Dus, 2 prefilled syringe @ 0,4 ml + 2 needles) Antiten-A (0.4 mL) (Box, 2 prefilled syringe @ 0,4 ml + 2 needles)	PT Bio Farma (Persero), Indonesia	Indonesia	DKL2102907843A1, 23 April 2021 23 April 2021
Antiten-A (0,6 mL) (Dus, 2 prefilled syringe @ 0,6 ml + 2 needles) Antiten-A (0.6 mL) (Box, 2 prefilled syringe @ 0.6 ml + 2 needles)	PT Bio Farma (Persero), Indonesia	Indonesia	DKL2102907843A1, 23 April 2021 23 April 2021
Antiten-A (1.0 mL) (Dus, 2 prefilled syringe @ 1 ml + 2 needles) Antiten-A (1.0 mL) (Box, 2 prefilled syringe @ 1 ml + 2 needles)	PT Bio Farma (Persero), Indonesia	Indonesia	DKL2102907843A1, 23 April 2021 23 April 2021
COVID-19 Vaccine AstraZeneca (Dus, 10 vial @ 5 ml (10 ds)) COVID-19 Vaccine AstraZeneca (Box, 10 vials @ 5 ml (10 ds))	Catalent Anagni S.R.L., Anagni, Italy	Indonesia	EUA2157200243A1 16 Mei 2021 16 May 2021
COV2BIO (Dus, 1 vial @ 5 ml (10 dosis)) (Box, 1 vial @ 5 ml (10 doses))	PT Bio Farma (Persero), Indonesia	Indonesia	EUA2102907643A1, 24-Jun-2021 24 June 2021





<b>Nama Produk</b> Product Name	<b>Pabrikan</b> Manufacturer	<b>Negara tempat produk terdaftar</b> Country where the product is registered	<b>Nomor dan Tanggal Persetujuan</b> Number and Approval Date
MODERNA COVID-19 Vaccine (Dus, 10 vial @ maximum 11 dosis: range 10-11 dosis) MODERNA COVID-19 Vaccine (Box, 10 vials @ maximum 11 doses: range 10-11 doses)	MODERNATX, INC., UNITED STATES OF AMERICA	Indonesia	EUA2159700143A1, 01 Juli 2021 EUA2159700143A1, 1 July 2021
MODERNA COVID-19 Vaccine (Dus, 10 vial @ maximum 15 dosis: range 13-15 dosis) MODERNA COVID-19 Vaccine (Box, 10 vials @ maximum 15 doses: range 13-15 doses)	MODERNATX, INC., UNITED STATES OF AMERICA	Indonesia	EUA2159700143A1, 01 Juli 2021 EUA2159700143A1, 1 July 2021
COVID-19 Vaccine AstraZeneca (Dus, 10 vial @ 5 ml (10 dosis)) COVID-19 Vaccine AstraZeneca (Box, 10 vials @ 5 ml (10 doses))	UNIVERSAL FARMA, S.L., SPAIN	Indonesia	EUA2159800143A1, 05 Juli 2021 EUA2159800143A1, 5 July 2021
Coronavac (Dus, 40 vials@1 ml (2 dosis)) Coronavac (Box, 40 vials@1 ml (2 doses))	SINOVAC LIFE SCIENCES CO., LTD CHINA (Yongda Site)	Indonesia	EUA2057300143A1, 11 Agustus 2021 11 August 2021
Comirnaty (DUS, 195 VIALS @ 6 DOSIS + DUS, 25 DILUENT VIALS @ 2 ML NACL 0.9%) Comirnaty (BOX, 195 VIALS @ 6 DOSES + BOX, 25 DILUENT VIALS @ 2 ML NACL 0.9%)	PHARMACIA & UPJOHN COMPANY LLC, UNITED STATES OF AMERICA	Indonesia	EUA2172101043A1, 25 Agustus 2021 25 August 2021
CONVIDECIA (Dus, 1 vial @ 0.5 ml (1 dosis)) CONVIDECIA (Box, 1 vial @ 0.5 ml (1 dose))	CANSINO BIOLOGICS INC., CHINA	Indonesia	EUA2160300143A1, 07 September 2021 7 September 2021
CONVIDECIA (Dus, 1 vial @ 1.5 ml (3 dosis)) CONVIDECIA (Box, 1 vial @ 1.5 ml (3 doses))	CANSINO BIOLOGICS INC., CHINA	Indonesia	EUA2160300143A1, 07 September 2021 7 September 2021
Vaksin Jera Td (Dus, 10 vial @ 10 ds) Adsorbed Td Vaccine (Box, 10 vials @ 10 ds)	PT Bio Farma (Persero), Indonesia	SAUDI ARABIA	0000011817, 13 September 2021 13 September 2021
Tuberculin PPD RT 23 SSI (Dus, 5 vial@ 1,5 ml (15 dosis)) Tuberculin PPD RT 23 SSI (Box, 5 vials@ 1.5 ml (15 doses))	AJ VACCINE A/S, COPENHAGEN, DENMARK	Indonesia	DKI0052700243B1, 13 September 2021 13 September 2021
Coronavac (Dus, 40 vials@ 1 ml (2 dosis)) Coronavac (Box, 40 vials@ 1 ml (2 doses))	SINOVAC LIFE SCIENCES CO., LTD, CHINA (Tianfu Site)	Indonesia	EUA 2057300143A1 21 September 2021 21 September 2021
Coronavac (Dus, 40 vials@ 1 ml (2 dosis)) Coronavac (Box, 40 vials@ 1 ml (2 doses))	SINOVAC LIFE SCIENCES CO., LTD, CHINA (Xiangrui Site)	Indonesia	EUA 2057300143A1 21 September 2021 21 September 2021
FastBio-RBD FIA Meter	GUANGZHOU WONDFO BIOTECH CO., LTD., China	Indonesia	KEMENKES RI AKL 20304127374, 27 November 2021 MINISTRY OF HEALTH OF RI AKL 20304127374, 27 November 2021



Nama Produk Product Name	Pabrikan Manufacturer	Negara tempat produk terdaftar Country where the product is registered	Nomor dan Tanggal Persetujuan Number and Approval Date
MODERNA COVID-19 VACCINE (Dus, 10 vial @ maximum 15 dosis: range 13-15 dosis) MODERNA COVID-19 VACCINE (Box, 10 vials @ maximum 15 doses: range 13-15 doses)	BAXTER PHARMACEUTICAL SOLUTIONS LLC, UNITED STATES OF AMERICA	Indonesia	EUA2161400143A1, 29 November 2021 29 November 2021
MODERNA COVID-19 VACCINE (Dus, 10 vial @ maximum 15 dosis: range 13-15 dosis) MODERNA COVID-19 VACCINE (Box, 10 vials @ maximum 15 doses: range 13-15 doses)	CATALENT INDIANA LLC, USA	Indonesia	EUA2122000343A1, 29 November 2021 29 November 2021
MODERNA COVID-19 VACCINE (Dus, 10 vial @ maximum 11 dosis: range 10-11 dosis) MODERNA COVID-19 VACCINE (Box, 10 vials @ maximum 11 doses: range 10-11 doses)	RECIPHARM MONTS, FRANCE	Indonesia	EUA2181400843A1, 29 November 2021 29 November 2021
MODERNA COVID-19 VACCINE (Dus, 10 vial @ maximum 11 dosis: range 10-11 dosis) MODERNA COVID-19 VACCINE (Box, 10 vials @ maximum 11 doses: range 10-11 doses)	ROVI PHARMA INDUSTRIAL SERVICES, SPAIN	Indonesia	EUA2161500143A1, 29 November 2021 29 November 2021
PFIZER-BIONTECH COVID-19 VACCINE (Dus, 195 vial @ 6 dosis + dus, 25 diluent vial @ 10 ml nacl 0.9%) PFIZER-BIONTECH COVID-19 VACCINE (Dus, 195 vials @ 6 doses + box, 25 diluent vials @ 10 ml nacl 0.9%)	HOSPIRA, INC.,USA	Indonesia	EUA2111901543A1, 29 November 2021 29 November 2021
FastBio-RBD (2019-nCoV Neutralizing Antibody Test) (Dus, kit, isi 25 tes) FastBio-RBD (2019-nCoV Neutralizing Antibody Test) (Box, kit, content: 25 tess)	GUANGZHOU WONDFO BIOTECH CO., LTD., China	Indonesia	KEMENKES RI AKL 20303127373, 08 Desember 2021 MINISTRY OF HEALTH OF RI AKL 20303127373, 8 December 2021
PFIZER-BIONTECH COVID-19 VACCINE (Dus, 195 vial @ 6 dosis + dus, 25 diluent vial @ 10 ml nacl 0.9%) PFIZER-BIONTECH COVID-19 VACCINE (Box, 195 vials @ 6 doses + box, 25 diluent vials @ 10 ml nacl 0.9%)	PHARMACIA & UPJOHN COMPANY LLC, KALAMAZOO, USA	Indonesia	EUA2172101143A1, 27 Desember 2021 27 December 2021
KCONECAVAC (Dus, 10 vial @ 5 ml (10 dosis)) KCONECAVAC (Box, 10 vials @ 5 ml (10 doses))	SHENZHEN KANGTAI BIOLOGICAL PRODUCT CO., LTD.,China	Indonesia	EUA2161000143A1, 31 Oktober 2021 31 October 2021
DIPHTEIRIA ANTITOXIN B.P (DUS, 1 VIAL @ 10 ML) DIPHTEIRIA ANTITOXIN B.P (BOX, 1 VIAL @ 10 ML)	VINS BIOPRODUCTS LTD., INDIA	Indonesia	DKI2160500143A1, 30 Oktober 2021 30 October 2021

b. Melakukan registrasi ulang (*renewal*) untuk produk yang masa berlaku izin edarnya perlu diperpanjang, sehingga selama 2021 diperoleh 21 persetujuan perpanjangan sesuai tabel di bawah ini.

b. Carrying out re-registration (*renewal*) for products whose distribution license validity period needs to be extended. During 2021, 21 extension approvals were obtained as seen in table below.



<b>Nama Produk</b> Product Name	<b>Pabrikasi, Asal</b> Manufacturer, Origin	<b>Negara tempat produk terdaftar</b> Country where the product is registered	<b>Nomor dan Tgl Persetujuan</b> Number and Approval Date
BIOSAT 1,5 (Dus, 10 ampul @ 1ml (1500 U)) BIOSAT 1,5 (Box, 10 ampoules @ 1ml (1500 U))	PT Bio Farma (Persero), Indonesia	Indonesia	DKL1102906643A1, 15-Feb-2021 15 February 2021
BIOSAT 20 (Dus, 1 vial @ 4 ml) BIOSAT 20 (Box, 1 vial @ 4 ml)	PT Bio Farma (Persero), Indonesia	Indonesia	DKL1102906643B1, 15-Feb-2021 15 February 2021
BIOADS (Dus, 1 vial @ 10 ml) BIOADS (Box, 1 vial @ 10 ml)	PT Bio Farma (Persero), Indonesia	Indonesia	DKL1102906743A1, 15-Feb-2021 15 February 2021
Vaksin DTP (Dus, 10 vial@ 5 ml (10 dosis)) DTP Vaccine (Box, 10 vials@ 5 ml (10 doses))	PT Bio Farma (Persero), Indonesia	Mesir Egypt	EGY/BP/July.2015/0085/01, 07 April 2021 7 April 2021
Shan IPV (Dus, 50 vial@ 2,5 ml (5 dosis)) (Box, 50 vials@ 2,5 ml (5 dosis))	SANOFI HEALTHCARE INDIA PRIVATE LIMITED, India	Indonesia	DKI1627100143A1, 28-Apr-2021 28 April 2021
Shan IPV (Dus, 50 vial @ 5 ml (10 dosis)) (Box, 50 vials@ 2,5 ml (5 dosis))	SANOFI HEALTHCARE INDIA PRIVATE LIMITED, India	Indonesia	DKI1627100143A1, 28-Apr-2021 28 April 2021
Bulk Polio Tipe 1 dan 3 (POL) Bulk Polio Type 1 and 3 (POL)	PT Bio Farma (Persero), Indonesia	India	IL/BIO-000017 - RC/BIO-000002, 11-May-2021 11 May 2021
Bulk Tetanus (PTT)	PT Bio Farma (Persero), Indonesia	India	IL/BIO-000071 - RC/BIO-000002, 10-May-21 10 May 21
Bulk Polio Tipe 1 dan 3 (POL) Bulk Polio Type 1 and 3 (POL)	PT Bio Farma (Persero), Indonesia	India	IL/BIO-000007 - RC/BIO-000002, 19-May-2021 19 May 2021
Vaksin TT (Dus, 10 vial@ 5 ml (10 dosis)) TT Vaccine (Box, 10 vials@ 5 ml (10 doses))	PT Bio Farma (Persero), Indonesia	Mesir	EGY/BP/Jun.2015/0083/01, 17-Jun-2020 (email diterima Bio Farma pada Juni 2021) 17 June 2020 (email was received by Bio Farma in June 2021)
Bulk Toksoid Difteri (PDT) Bulk Purified diphtheria toxoid (PDT)	PT Bio Farma (Persero), Indonesia	India	RC/BIO-000002, 11-May-2021 11 May 2021
Bulk Toksoid Tetanus (PTT) Bulk Purified Tetanus Toxoid (PTT)	PT Bio Farma (Persero), Indonesia	India	RC/BIO-000002, 11-May-2021 11 May 2021
Bulk Pertussis (wPFB)	PT Bio Farma (Persero), Indonesia	India	RC/BIO-000002, 11-May-2021 11 May 2021
Bulk Polio Tipe 1 Bulk Polio Type-1	PT Bio Farma (Persero), Indonesia	India	RC/BIO-000002, 11-May-2021 11 May 2021
Bulk Polio Tipe 3 Bulk Polio Type-3	PT Bio Farma (Persero), Indonesia	India	RC/BIO-000002, 11-May-2021 11 May 2021
Bulk Hib (CHL)	PT Bio Farma (Persero), Indonesia	India	RC/BIO-000002, 11-May-2021 11 May 2021

Nama Produk Product Name	Pabrikasi, Asal Manufacturer, Origin	Negara tempat produk terdaftar Country where the product is registered	Nomor dan Tgl Persetujuan Number and Approval Date
VAKSIN DTP-HB 10 (Dus, 10 vial @ 10 dosis (5 ml)) DTP-HB 10 VACCINE (Box, 10 vials @ 10 doses (5 ml))	PT Bio Farma (Persero), Indonesia	Indonesia	GKL0302906043B1, 5-Jul-2021 5 July 2021
mBioCov-19 RT-PCR Kit	PT Bio Farma (Persero), Indonesia	Indonesia	KEMENKES RI AKD 20303021507, 01 Juli 2021 MINISTRY OF HEALTH OF RI AKD 20303021507, 1 July 2021
BioVTM	PT Bio Farma (Persero), Indonesia	Indonesia	KEMENKES RI AKD 10302020808, 01 Juli 2021 MINISTRY OF HEALTH OF RI AKD 10302020808, 1 July 2021
Vaksin Hepatitis B rekombinan 1 mL (Dus, 10 pouch @ 1 prefilled syringe (uniject) @ 1 ml) Recombinant hepatitis B vaccine 1 mL (Box, 10 pouches @ 1 prefilled syringe (uniject) @ 1 ml)	PT Bio Farma (Persero), Indonesia	Indonesia	GKL9802905543A1, 14-Des-2021 14 December 2021
HBV (Dus, 1 pouch @ 1 prefilled syringe (uniject) @ 1 ml) (Box, 1 pouch @ 1 prefilled syringe (uniject) @ 1 ml)	PT Bio Farma (Persero), Indonesia	Indonesia	DKL0302905943A1, 14-Des-2021 14 December 2021

c. Melakukan registrasi variasi kepada *authority* terkait sesuai dengan disposisi *change control management* dan juga melakukan *routine report* WHO PQVAR sesuai dengan jadwal di bawah ini untuk produk – produk biofarma dengan status WHO PQ-ed.

c. Carrying out registration of variations to the relevant authorities in accordance with the disposition of change control management and also carrying out routine WHO PQVAR according to the schedule below for Bio Farma products with WHO PQ-ed status.

Produk Product	Date of PQ by WHO	PQVAR Timeline
TT Uniject 1 ds	29 Oktober October 2003	Januari January
mOPV1 20 ds	3 November 2009	Januari January
Pentabio 5 & 10 ds	19 December 2014	Januari January
bOPV 10 ds	05 November 2015	Januari January
TT Vaccine 10 & 20 ds	11 Maret March 1999	Mei May
DT Vaccine 10 ds	11 Maret March 1999	Mei May
OPV (trivalent) 10 & 20 ds	31 Agustus August 2020 (Reactivation)	Mei May
DTP Vaccine 10 ds	6 April 2001	Mei May
Measles Vaccine 10 ds	9 April 1997	Mei May
Measles Vaccine 20 ds	4 September 2006	Mei May
bOPV 20 ds	26 Mei May 2010	Mei May
Td Vaccine 10 ds	6 Juli July 2011	September
mOPV2 20 ds	21 Juni June 2019	September



- d. Mengembangkan berbagai kegiatan penjualan dengan menggunakan media *online/offline* seperti:
- Membuat konten promosi di *website* dan social media Imunicare
  - Menggunakan sarana *email blast*
  - Membuat desain konten promosi untuk informasi dan edukasi
  - Koordinasi operasional layanan *Call Center / Bio Care 1500810*
  - Penerapan SEO, SEM dan SMM untuk *website* dan social media Imunicare
- e. Melaksanakan program kegiatan promosi yang terintegrasi seperti:
- *Sponsorship* kegiatan ilmiah dan komunitas yang relevan (*Webinar, Talkshow, Simposium, dll*)
  - Mengikuti kegiatan pameran virtual yang relevan (*World Heart Day PERKI, Hannover Messe 2021, KONIKA XVIII IDAI, dll*)
  - *Launching* produk dan *brand activation* produk baru (*Biosaliva*)
  - Pembuatan video-video produk dan konten animasi
  - *Launching* mitra Imunicare
  - Membuat dan mendistribusikan material promosi (*gimmick / merchandise*) untuk mendukung 373 kegiatan pemasaran.
- f. Melakukan total 7.186 kali pengiriman vaksin, sera, *bulk*, dan alkes tujuan dalam dan luar negeri untuk kontrak dan tender.
- g. Melakukan distribusi sebanyak 300 juta dosis vaksin COVID-19 sepanjang tahun 2021.
- h. Pemutakhiran fasilitas penunjang proses distribusi dengan mengimplementasi dan *update* sistem *track and trace* (TnT), *generate barcode* untuk jumlah sisa vaksin, penambahan fasilitas penyimpanan vaksin dan pelarut vaksin COVID-19 Pfizer, dan implementasi aplikasi BOSNET dalam menunjang transaksi PBF.
- i. Melakukan penjualan dan pendistribusian vaksin, serum, alkes, dan obat melalui PBF Bio Farma ke Dinas Kesehatan, Apotek, Rumah Sakit, Laboratorium, dan instansi lainnya di wilayah Jawa Barat dan DKI Jakarta.
- j. PBF Bio Farma menjadi salah satu hub dalam pendistribusian vaksin COVID-19 untuk tujuan Dinas Kesehatan Kabupaten/Kota di area Jawa Barat.
- k. Melakukan kerjasama distribusi Vaksin Gotong Royong dari Sinopharm dengan PT Kimia Farma.
- l. Melaksanakan *monitoring* kualitas vaksin ke beberapa Dinas Kesehatan Provinsi.
- d. Developing several sales activities using *online/offline* media such as:
- Creating promotional contents on the Imunicare website and social media
  - Using email blasts
  - Designing promotional content for information and education
  - Operational coordination of *Call Center/Bio Care 1500810* services
  - Implementing SEO, SEM and SMM for Imunicare website and social media
- e. Melaksanakan program kegiatan promosi yang terintegrasi seperti:
- Sponsoring relevant scientific and community programs (*Webinars, Talk shows, Symposiums, etc.*)
  - Participating in relevant virtual exhibition programs (*World Heart Day PERKI, Hannover Messe 2021, KONIKA XVIII IDAI, etc.*)
  - Launching new products and new product brand activation (*Biosaliva*)
  - Creating product videos and animated contents
  - Launching Imunicare partners
  - Creating and distributing promotional materials (*gimmicks/merchandise*) to support 373 marketing activities.
- f. Carrying out a total of 7,186 domestic and international shipments of vaccines, sera, bulk and medical supplies for contracts and tenders.
- g. Distributing 300 million doses of COVID-19 vaccine throughout 2021.
- h. Updating the distribution process support facilities through the implementation and update of track and trace (TnT) system, generating barcodes for the remaining amount of vaccine, adding Pfizer vaccine storage facilities and COVID-19 vaccine solvents, and implementing the BOSNET application to support PBF transactions.
- i. Selling and distributing vaccines, serum, medical devices, and drugs through PBF Bio Farma to the Health Offices, Pharmacies, Hospitals, Laboratories, and other agencies in West Java and DKI Jakarta.
- j. PBF Bio Farma is one of the hubs in the distribution of COVID-19 vaccines for the destination of Health Offices in Regencies/Municipalities in the West Java area.
- k. Carrying out collaboration on the distribution of Mutual Cooperation Vaccination from Sinopharm with PT Kimia Farma.
- l. Carrying out monitoring of vaccine quality to several Provincial Health Offices.



- m. Menyusun protokol validasi pengiriman vaksin COVID-19 Coronavac, COVID-19 Bio Farma, COVID-19 AstraZeneca dan vaksin nOPV 20 ds serta melakukan analisis risiko pengepakan vaksin COVID-19 Pfizer.
- n. Melakukan validasi kendaraan *reefer truck* untuk angkutan vaksin kondisi *fully loaded*.
- o. Melaksanakan audit baik dari pihak internal maupun eksternal.
- p. Memberikan pelatihan ke beberapa Dinas Kesehatan dan *sharing knowledge* kepada tamu yang melakukan kunjungan ke Bio Farma terkait penanganan *cold chain system*.
- q. Efisiensi biaya distribusi dengan melakukan perubahan pola *distributorship* penjualan sektor swasta melalui penunjukan distributor utama di setiap ibukota provinsi.

#### 4. Divisi Ritel & Pelayanan

Untuk memasarkan Produk & Jasa di Divisi Ritel & Pelayanan Bio Farma merealisasikan berbagai kegiatan, yakni:

- a. Kerjasama kemitraan Imunicare dengan Fasilitas kesehatan yang dimiliki Holding Farmasi BUMN, IHC dan BUMN lainnya serta swasta yang telah melaksanakan Vaksinasi Gotong Royong (VGR)
- b. Kerjasama Penyediaan Vaksin dan Kit Diagnostik (PCR, VTM dll) di seluruh fasilitas kesehatan Holding Farmasi BUMN, IHC dan Sinergi BUMN
- c. Meningkatkan Promosi dan mengembangkan penjualan melalui online
- d. Penambahan layanan Pemeriksaan Covid-19 (Swab Antigen dan PCR)
- e. Meningkatkan Kerja sama ke Perusahaan dan Instansi untuk program vaksinasi dewasa seperti Vaksin FLU, Vaksin Hepatitis B dan lainnya)

### PENELITIAN DAN PENGEMBANGAN

1. Penelitian dan Pengembangan Produk  
Bio Farma merealisasikan penelitian dan pengembangan produk-produk:
  - a. Pengembangan vaksin.
  - b. Pengembangan translasi produk Bio Farma.
  - c. Pengembangan produk Imunosera, Regeneratif, dan *Therapy* berbasis protein.

Perusahaan saat ini sedang mengembangkan vaksin COVID-19, sehubungan dengan adanya penugasan yang diterima oleh Perusahaan dari Pemerintah untuk penyediaan kebutuhan atas vaksin COVID-19.

2. Inovasi Produk  
Berbagai kegiatan inovasi produk sepanjang tahun 2021:
  - a. Studi pendahuluan medium halal produksi *single harvest*.

- m. Developing a validation protocol for shipments of COVID-19 Coronavac, COVID-19 Bio Farma, COVID-19 AstraZeneca and nOPV 20 ds vaccines and carrying out a packaging risk analysis of Pfizer COVID-19 vaccine.
- n. Performing validation of reefer trucks for vaccine transportation in fully loaded conditions.
- o. Carrying out audits by internal and external parties.
- p. Providing training to several Health Offices and sharing knowledge with guests visiting Bio Farma regarding the handling of the cold chain system.
- q. Distribution cost efficiency by changing the distribution pattern of private-sector sales by appointing a main distributor in each provincial capital.

#### 5. Retail & Service Division

To market Products & Services in the Retail & Service Division, Bio Farma realized ... programs, including:

- a. Imunicare Coownership with health facilities under Pharmaceutical SOEs Holding, IHC, and other SOEs as well as public sector who has participated in Gotong Royong Vaccination (VGR)
- b. Partnership in Vaccines Supply and Diagnostic Kit (PCR, VTM, etc) in all health facilities of Pharmaceutical SOEs Holding, IHC, and SOEs Synergy.
- c. Increasing Promotion and Development of sales through online platform.
- d. Addition of Covid-19 testing facilities (Swab, Antigen, and PCR)
- e. Increasing Partnership with Companies and Agency regarding adult vaccination program such as Flu Vaccines, Hepatitis B Vaccines, and others.

### RESEARCH AND DEVELOPMENT

1. Product Research and Development  
Bio Farma realizes research and development of the following products:
  - a. Vaccine development.
  - b. Development of translation of Bio Farma products.
  - c. Development of protein-based Immunosera, Regenerative, and Therapy products.

The company is currently developing a COVID-19 vaccine, in relation to the assignment received by the Company from the Government for the provision of the need for a COVID-19 vaccine.

2. Product Innovation  
Product innovation activities throughout 2021 included.
  - a. Preliminary study of halal medium for single harvest production.



- b. Studi proses pemekatan toksoid.
  - c. Penggantian koneksi aseptis.
  - d. Pembuatan *working seed lot*.
3. Surveilans dan Evaluasi Produk
- Selama tahun 2021, Bio Farma merealisasikan berbagai kegiatan surveilans dan uji klinis, yakni:
- a. Melakukan uji laboratorium serologi/isolasi & identifikasi molekuler virus polio/campak/rubella/rotavirus dari program Surveilans AFP (Acute Flaccid Paralysis), Polio Lingkungan, Campak, Rubella, Congenital Rubella Syndrome (CRS) dan Rotavirus.
  - b. Melakukan uji laboratorium isolasi & identifikasi molekuler virus polio/campak/rotavirus dari sampel internal Bio Farma
  - c. Melakukan Uji klinis vaksin Typhoid (Vi-DT) fase III, vaksin Rotavirus fase III, *bridging study* vaksin Pentabio dengan hepatitis B vendor baru, vaksin Hepatitis B Monovalent Bio Farma fase III, *bridging study* vaksin Pentabio (Bulk Hepatitis B Bio Farma), Kinetical Ab Vi-DT, *bridging study* BCG, vaksin SARS-CoV2 (Sinovac) Fase III, vaksin COVID BUMN (RBD+Alum) Fase I pada usia 18 tahun ke atas
  - d. Melakukan pemeriksaan titer antibodi karyawan
  - e. Melakukan manajemen data farmakovigilans baik dalam maupun luar negeri.
  - f. Menyusun dokumen-dokumen farmakovigilans (PSUR/ *Periodic Safety Update Reports*, PSMF, PBRER/ *Periodic Benefit-Risk Evaluation Report*, profil KIPI/Kejadian Ikutan Pasca Imunisasi tahunan)
  - g. Melakukan *Post Marketing Surveillance* (PMS) Vaksin COVID-19
  - h. Melakukan aktivitas terkait komitmen Post EUL nOPV2 (Enhanced AESI/Adverse Event Special Interest surveillance, Enhanced AFP surveillance, Enhanced environmental surveillance, dll)
  - i. Melakukan pemantauan keamanan vaksin TOPV ekspor UNICEF

- b. Study of the toxoid concentration process.
  - c. Aseptic connection replacement.
  - d. Produce working seed lots.
3. Product Surveillance and Evaluation
- During 2021, Bio Farma realized several surveillance activities and clinical trials, including:
- a. Perform serology/isolation laboratory tests & virus molecular identification polio/measles/rubella/rotavirus from the AFP (Acute Flaccid Paralysis) Surveillance program, Environmental Polio, Measles, Rubella, Congenital Rubella Syndrome (CRS) and Rotavirus.
  - b. Performing virus isolation & molecular identification laboratory tests polio/measles/rotavirus from Bio Farma's internal samples
  - c. Conducting clinical trials of Typhoid vaccine (Vi-DT) phase III, Rotavirus vaccine phase III, bridging Pentabio vaccine study with new vendor hepatitis B, Bio Farma Monovalent Hepatitis B vaccine phase III, Pentabio vaccine bridging study (Bulk Hepatitis B Bio Farma), Kinetic Ab Vi-DT, BCG bridging study, SARS-CoV2 vaccine (Sinovac) Phase III, BUMN COVID vaccine (RBD+Alum) Phase I at the age of 18 years and above
  - d. Conduct employee antibody titer checks
  - e. Perform pharmacovigilance data management both at domestic level and international level
  - f. Prepare pharmacovigilance documents (PSUR/ *Periodic Safety Update Reports*, PSMF, PBRER/ *Periodic Benefit-Risk Evaluation Report*, AEFI/Event profile Follow-up after annual immunization)
  - g. Doing *Post Marketing Surveillance* (PMS) for the COVID-19 Vaccine
  - h. Carry out activities related to Post EUL nOPV2 (Enhanced AESI/Adverse Event Special Interest surveillance, Enhanced AFP surveillance, Enhanced environmental surveillance, etc.
  - i. Monitoring the safety of UNICEF's export TOPV vaccine

## KERJA SAMA

### Kerja Sama Baru

#### Aspek Pemasaran

Bio Farma menjalin kerjasama baru dalam rangka memasarkan produk-produknya dengan berbagai distributor dan mitra, baik di dalam negeri, maupun luar negeri terkait registrasi, pemasaran, dan penjualan produk untuk memenuhi kebutuhan pasar, seperti kerja sama penjualan vaksin dan alat kesehatan dengan Kementerian Kesehatan Republik Indonesia

## COLLABORATION

### New Collaborations

#### Marketing Aspects

Bio Farma has established a new partnership to market its products with various domestic and internal distributors and partners regarding registration, marketing, and product sales to meet market needs, such as collaboration in the sale of vaccines and medical devices with the Ministry of Health of the Republic of Indonesia to be used for the Routine

yang akan digunakan untuk Program Imunisasi Rutin, dan untuk Program vaksinasi COVID-19. Bio Farma juga telah menandatangani perjanjian kerja sama distribusi Produk dengan PT Indofarma Global Medika dan PT Kimia Farma Trading and Distribution sebagai distributor utama produk-produk Bio Farma.

Bio Farma juga mengadakan peninjauan kerja sama baru dengan mitra internasional seperti Biovaccines Nigeria Limited dalam hal registrasi vaksin, pemasaran, dan penjualan produk.

Kerjasama baru yang dilakukan oleh Bio Farma dengan menggandeng provider digital untuk mendukung pengembangan ekosistem *Healthcare* di Indonesia. Bio Farma berupaya melakukan transformasi digital dengan bekerjasama dengan ConnectedLife Health Pte. Ltd yang berkedudukan di Singapura dan FitBit LCC. Yang berkedudukan di Amerika Serikat. Inisiasi awal dari Kerjasama ini dalam pengembangan produk pelacakan kesehatan (*Tracking*) dan aktivitas kebugaran (*Wellness*), cakupan di awal dengan mengembangkan *platform digital* Preventive Care System dengan *scoop* fase awal untuk penyakit Diabetes Melitus.

*Platform digital* Preventive Care System dengan menggabungkan *wearable device* berupa *smartwatch* yang dikembangkan oleh FitiBit dan pengembangan aplikasi ConnectedCare berupa aplikasi Medwell yang dapat diampu oleh pasien melalui telepon genggam yang terhubung dengan *dashboard* di tenaga kesehatan ataupun fasilitas kesehatan. Sehingga aktivitas fisik, kebiasaan makan dan minum, kualitas tidur dan metabolisme dari pasien dapat dikontrol berdasarkan Preventive Care System.

### Penelitian dan Pengembangan

Di tahun 2021, Bio Farma mendapatkan program *grant* lanjutan dari Bill & Melinda Gates Foundation sehubungan dengan peningkatan kapasitas dan *stockpile* nOPV2. Keberhasilan proyek nOPV2 hingga berhasil diterima sebagai vaksin dengan sertifikasi EUL oleh WHO, mengantarkan kepercayaan dan *grant* lainnya yang juga diberikan oleh BMGF untuk pengembangan produksi vaksin nOPV1 dan 3. Melalui BMGF, Biofarma juga bekerja sama untuk pelaksanaan uji klinis fase 2 vaksin nOPV2 di Bangladesh.

Bio Farma juga terlibat secara aktif dalam kerjasama penelitian dengan pihak eksternal pada tingkat nasional dan internasional. Pada tingkat Nasional, Biofarma terlibat pada konsorsium Riset Vaksin Nasional untuk pengembangan produk-produk vaksin bersama beberapa institusi penelitian dan universitas di dalam negeri. Kerjasama penelitian lainnya pada skala nasional juga dilakukan Bio Farma dalam penelitian dan pengembangan yang berkaitan dengan COVID-19, yaitu dalam pengembangan Vaksin COVID-19 Merah Putih dengan BRIN/Lembaga

Immunization Program and the COVID-19 vaccination Program. The Company has also signed a product distribution cooperation agreement with PT Indofarma Global Medika and PT Kimia Farma Trading and Distribution as the main distributors of the Company's products.

In addition, the Company has explored new collaborations with international partners such as Biovaccines Nigeria Limited in terms of vaccine registration, marketing, and product sales.

A new collaboration carried out by Bio Farma together with digital providers to support the development of the Healthcare ecosystem in Indonesia. Bio Farma seeks to carry out digital transformation by collaborating with ConnectedLife Health Pte. Ltd, domiciled in Singapore and FitBit LCC. Domiciled in the United States. The initiation of this collaboration was in the development of tracking products and fitness activities (*Wellness*), the initial coverage was to develop a digital platform for the Preventive Care System with an early phase *scoop* for Diabetes Mellitus.

The Preventive Care System digital platform combines a wearable device in the form of a smartwatch developed by FitiBit and the development of the ConnectedCare application in the form of the Medwell application which can be assisted by patients via mobile phones connected to dashboards in health workers or health facilities. So that physical activity, eating and drinking habits, sleep quality and metabolism of the patient can be controlled based on the Preventive Care System.

### Research and Development

In 2021, Bio Farma received a follow-up grant program from the Bill & Melinda Gates Foundation in relation to capacity building and nOPV2 stockpile. The success of the nOPV2 project up until the point at which it was successfully accepted as a vaccine with EUL certification by WHO, led to the trust and other grants that were also given by BMGF for the development of the production of nOPV1 and 3 vaccines. Through BMGF, Biofarma is also cooperating in the implementation of phase 2 clinical trials of the nOPV2 vaccine in Bangladesh.

Bio Farma is also actively involved in collaborative research with external parties at national and international levels. At the national level, Biofarma is involved in the National Vaccine Research consortium for the development of vaccine products with several research institutions and universities in the country. Other research collaborations on a national scale are also being carried out by Bio Farma in research and development related to COVID-19, including in the development of the Red and White COVID-19 Vaccine with BRIN / the Eijkman Institute and also the





Eijkman dan juga pengembangan kit diagnostik untuk deteksi COVID-19 yang bekerjasama dengan BPPT dan lembaga riset lainnya. Selain itu, penelitian uji klinis vaksin juga bekerjasama dengan beberapa universitas juga dilakukan.

Kerjasama penelitian pada tingkat internasional dilakukan oleh Biofarma yaitu di antaranya dengan Baylor College of Medicine (BCM) di Amerika untuk pengembangan vaksin COVID-19 BUMN sebagai salah satu upaya percepatan penyediaan vaksin COVID-19 secara mandiri di Indonesia. Kerja sama luar negeri lainnya dilakukan sebagai strategi jangka menengah dan panjang dalam pengembangan Vaksin Pandemi dan Vaksin lainnya. Salah satu kerjasama pada area ini ialah kerjasama dengan Lipotek dari Australia untuk vaksin TB. Bio Farma juga berusaha mendapatkan *platform* teknologi baru dalam pengembangan *Rapid Response*, berupa teknologi mRNA dan adenovirus. Selain itu, salah satu upaya peningkatan *capacity building* bidang pengembangan vaksin, Bio Farma menjadi salah satu member Vax-Hub, suatu konsorsium di bidang pengembangan vaksin berbasis di United Kingdom (UK).

#### Kerja Sama Lanjutan Pemasaran

Bio Farma melanjutkan kerjasama dengan berbagai mitra perusahaan untuk registrasi, pemasaran, penjualan serta distribusi produk untuk wilayah Indonesia. Bio Farma juga tetap melanjutkan kerjasama dengan UNICEF, PAHO, dan *international partner* yang ditunjuk untuk pemasaran di pasar global melalui kerja sama bilateral.

### TINJAUAN KINERJA KEUANGAN PT BIO FARMA (INFORMASI HANYA UNTUK ENTITAS INDUK)

Laporan Keuangan Audited PT Bio Farma (Persero) (Entitas Induk saja) pada tanggal 31 Desember 2020 dan 2021 menjadi basis dalam pembahasan dan analisis kinerja keuangan sebagaimana terlampir dalam buku Laporan Tahunan ini. Laporan Keuangan Audited tersebut telah diaudit oleh Kantor Akuntan Publik Kreston Hendrawinata Hanny Erwin dan Sumargo HHES member *firm* dari KRESTON HHES dengan pendapat wajar dalam semua hal yang material, posisi keuangan PT Bio Farma (Persero), Entitas Induk saja tertanggal 31 Desember 2021, serta kinerja keuangan dan arus kas untuk tahun yang berakhir pada tanggal tersebut sesuai dengan Standar Akuntansi Keuangan di Indonesia.

Pembahasan dan analisis kinerja keuangan Bio Farma, Entitas Induk, disajikan dalam empat bagian, yakni:

1. Laporan Laba Rugi dan Penghasilan Komprehensif Lain

development of a diagnostic kit for COVID-19 detection in collaboration with the Agency for the Assessment and Application of Technology and other research institutes. In addition, vaccine clinical trials are also being conducted in collaboration with several universities.

Research collaborations at the international level are also being carried out by Biofarma, including Baylor College of Medicine (BCM) in America for the development of a BUMN COVID-19 vaccine as one of the efforts to accelerate the provision of COVID-19 vaccines independently in Indonesia. Other foreign cooperation is carried out as a medium and long term strategy in the development of Pandemic Vaccines and other Vaccines. One of the collaborations in this area is the collaboration with Lipotek from Australia for the TB vaccine. Bio Farma is also trying to get a new technology platform in the development of Rapid Response, in the form of mRNA and adenovirus technology. In addition, as an effort to increase capacity building in the field of vaccine development, Bio Farma is a member of Vax-Hub, a consortium in the field of vaccine development based in the United Kingdom (UK).

#### Continued Collaborations Marketing

Bio Farma continues to collaborate with various company partners for registration, marketing, sales and product distribution in the various regions of Indonesia. Bio Farma also continues to collaborate with UNICEF and appointed distributors for marketing in the global market through bilateral cooperation.

### FINANCIAL PERFORMANCE REVIEW OF PT BIO FARMA (PARENT ENTITY ONLY)

As of December 31, 2020, and 2021, the Audited Financial Statement of PT Bio Farma (Persero) (Parent Entity only) was the basis for discussion and analysis of financial performance as attached in this Annual Report. The Audited Financial Statement has been audited by a Public Accounting Firm Kreston Hendrawinata Hanny Erwin and Sumargo HHES firm member from KRESTON HHES with a fair opinion in all material respects. The financial position of PT Bio Farma (Persero) (Parent Entity only), financial performance and cash flows for the year expires on December 31, 2021, in accordance with Indonesian Financial Accounting Standards.

Discussion and analysis of Bio Farma (Parent Entity)'s financial performance is presented in four parts as follows:

1. Income Statement and Other Comprehensive Income