

Nedspice onion dehydration factory

WORKING TOGETHER ON
SUSTAINABLE SPICING



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“Nedspice is a successful and rapidly growing spices ingredients company. **Our growth can only be maintained if it benefits all our stakeholders and if sustainability principles are respected.**”

ALFONS VAN GULICK,
CEO AND GROUP MANAGING DIRECTOR

New sustainable onion dehydration factory

NEDSPICE DEHYDRATION INDIA LLP.

- 1 **Sustainably grown onions** through Nedspice Farmers Partnership Programme

Read more on page 4 – 5

- 2 A sustainable factory with an **innovative drying process**

Read more on page 6 – 7

- 3 **60% lower CO₂ emission** compared to a traditional dehydration factory

Read more on page 8 – 9

- 4 Prevention of water scarcity through **circular water use**

Read more on page 10 – 11

- 5 **Processing capacity of 4,000 tonnes** per year with a possibility to increase to 12,000 tonnes

More info on product specifications on page 12 – 13

- 6 Guaranteed high quality and food safe ingredients **verified by third-party certifications**

Read more on page 14 – 15

Working together on sustainable spicing

NEDSPICE FARMERS PARTNERSHIP PROGRAMME

To ensure a true sustainable supply chain, we start at the source. We work together with onion farmers from Gujarat, in the North-West of India, and support them in making their cultivation practices more environmentally, economically and socially sustainable. We do this through regular trainings on good agricultural practices, on-farm support whenever required and payment of fair prices.

Nedspice Farmers Partnership Programme

Farmers who join the Nedspice Farmers Partnership Programme can benefit from years of experience in farmer trainings as well as a financially attractive and long-term partnership.

Did you know the Gujarati word for Onion is ડુંગળી (ડુંગળી)?

Full traceability

By cutting out the middlemen and working directly with the farmers, we can control product quality and ensure that the onions are grown in a sustainable manner. Equally important, our direct supply chain allows us to pay farmers a fair price for their product.

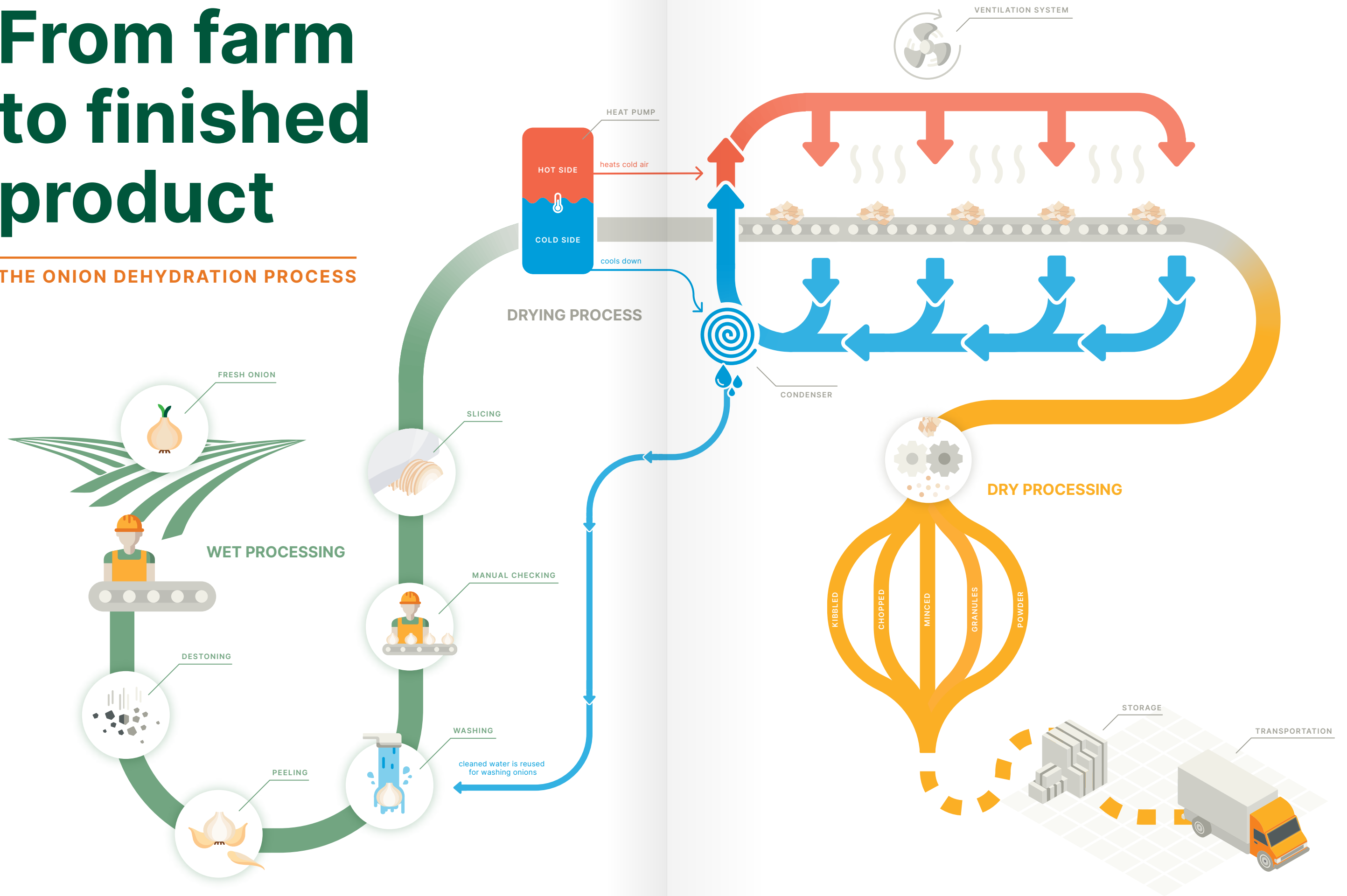
All NFPP onion farmers are registered members of the Farmer Producer Organisation (FPO). Our aim is to develop the FPO to 5000 onion farmers by 2025.

**“The trainings
I received really
helped me to
increase my yield.”**

GOVINDBHAI MEGHABHAI BHALALA,
ONION FARMER FROM BODA VILLAGE, JOINED NFPP IN 2020.

From farm to finished product

THE ONION DEHYDRATION PROCESS



Bringing down CO₂ emissions with 60%

HOW DO WE DO THIS?

“Our method of dehydrating onions is **revolutionary**, we are very proud of the contribution it makes to achieving our sustainability goals.”

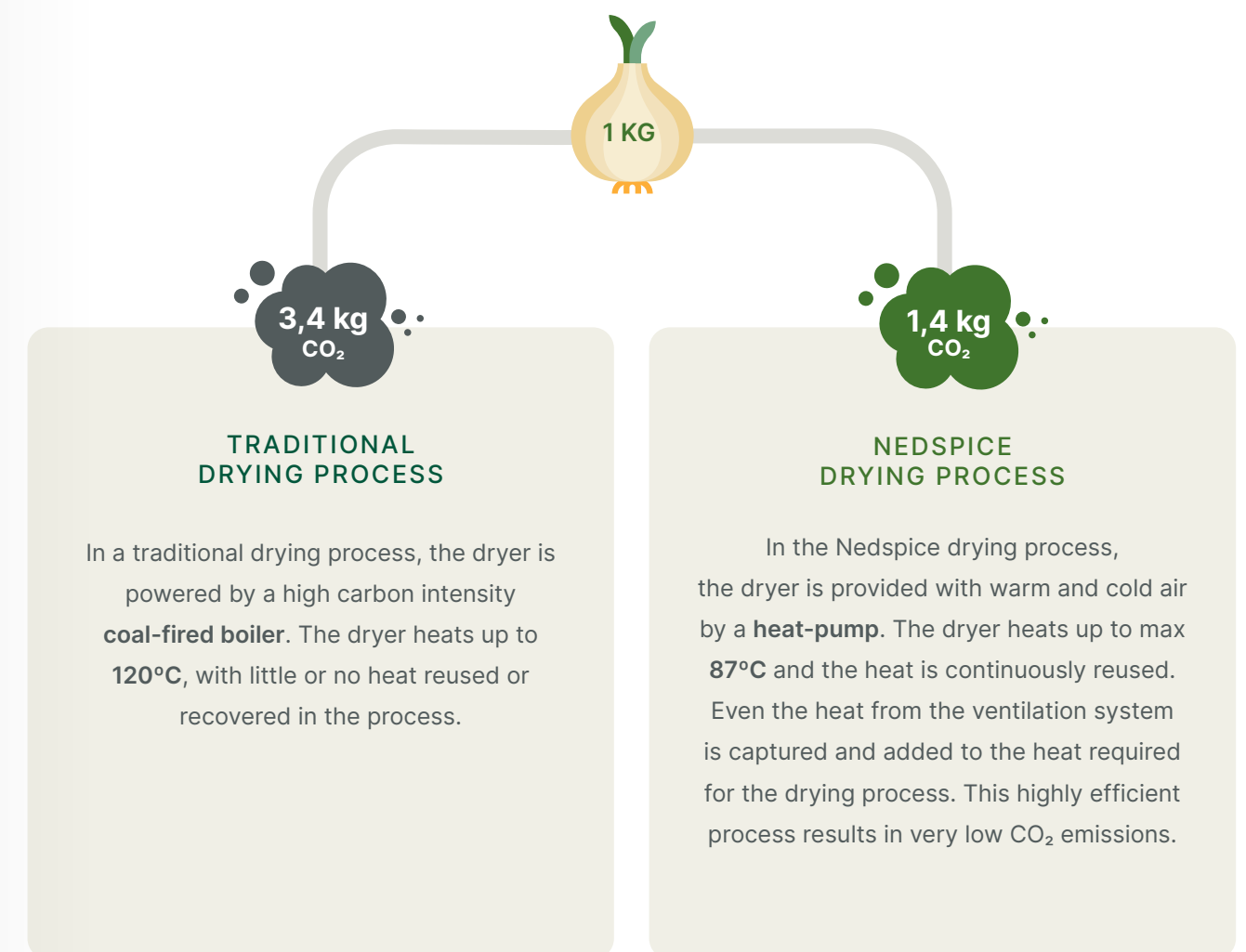
SAKHARAM GHODKE,
GENERAL MANAGER NEDSPICE DEHYDRATION INDIA LLP.

Nedspice is committed to improve the spice industry in a sustainable way. We do this by working together with farmers and by prioritising sustainability throughout our supply chain.

We have worked very hard to create a dehydration factory that operates in a sustainable way and thereby contributes to the UN Sustainable Development Goals, whilst producing tasteful

ingredients of the highest quality. Through the innovative drying process, we reduce our CO₂ emission by 60% compared to traditional dehydration factories. This means that we save around

7.8 million kilograms of CO₂ each year. This equates to 15 hectares of deforested land or even to launching one modern space shuttle!



Closing the water cycle

EFFICIENCY IN WATER USE AND PREVENTION OF WATER SCARCITY IN THE AREA

Worldwide the agriculture sector is the highest consumer of water, around 70% of freshwater withdrawals are used for agricultural purposes, such as irrigation and processing. As the demand for food continues to increase, the demand for water consumption will grow likewise. Therefore, we need to handle our water with care and increase the efficiency of water use.

In the Nedspice dehydration factory, the water that evaporates from the onion during the dehydration process is collected, cleaned and reused to wash the onions.

By doing this we save 67% water compared to a traditional dehydration factory. On busy days, this can add up to a difference of 100.000 litres of water per day.

In the future we even expect a positive water balance, which allows us to share the excess water with onion farmers in the region.

After the water is made fit for agriculture use, the water can be used for irrigation purposes.



TRADITIONAL DRYING PROCESS

A traditional dehydration factory is usually dependent on ground water to wash the raw material. The water used for washing and processing is released back into the environment, frequently without any prior cleaning or removing of oils and harmful chemicals.

NEDSPICE DRYING PROCESS

The Nedspice dehydration factory reuses the water that is extracted from the onion during the dehydration process. As a result, it is not fully dependent on an external water supply. A welcome innovation for a water scarce area like Mahuva, Gujarat. Furthermore, the Nedspice dehydration factory is a chloride free zone, instead the wash water is purified with ozone.

Product specifications

DEHYDRATED ONION

The factory has a processing capacity of 4,000 tonnes per year with a possibility to increase to 12,000 tonnes. This means we can process close to 84,000 tonnes of fresh onion per year.

The onions are dried at a low temperature which enables a more homogenously coloured dehydrated product. During the dehydration process the raw ingredients are pasteurized, this ensures a food safe finished product that is ready to eat.

We can produce our dehydrated products with varying microbiological grades, from standard to extra low bacterial grade. And for customers catering to extremely strict markets Nedspice is currently the only one who can offer Ultra low bacterial grade using

our inhouse natural proprietary process. Please see the microbiological breakdown below.

Next to this, we are continuously trialling new varieties to get optimum flavour profiles.

Product grades	TVC	Y&M	ENTERO	E. COLI	SALMONELLA	S. AUREUS	B. CEREUS	C. PERFRINGENS	COLIFORM	L. MONOCYTOGENES
Nedspice Ultra Low Bac.	< 50,000	< 500	< 1000	absent	absent	< 100	< 100	< 100	< 100	absent
Extra low Bac.	< 100,000	< 1000	< 1000	<10	absent	< 100	< 100	< 100	< 100	absent
Low Bac.	< 500,000	< 5000	< 1000	<100	absent	< 1000	< 1000	< 1000	< 200	absent
Standard Bac.	< 1,000,000	< 10,000	< 3000	<100	absent	< 3000	< 3000	< 3000	< 500	absent

If you have any specific questions on product sizes or microbiological grades please contact your sales manager directly or contact us at dehydrates@nedspice.com or +31 10 28 01 365.

We can provide dehydrated onion as kibbled, chopped, minced, granulated or powdered. Below you can find an overview of the different particle sizes available.



Guaranteed high quality

CERTIFICATIONS

“The commitment to product quality is present throughout the supply chain.”

ANANT LAHANE,
NEDSPICE QUALITY MANAGER.

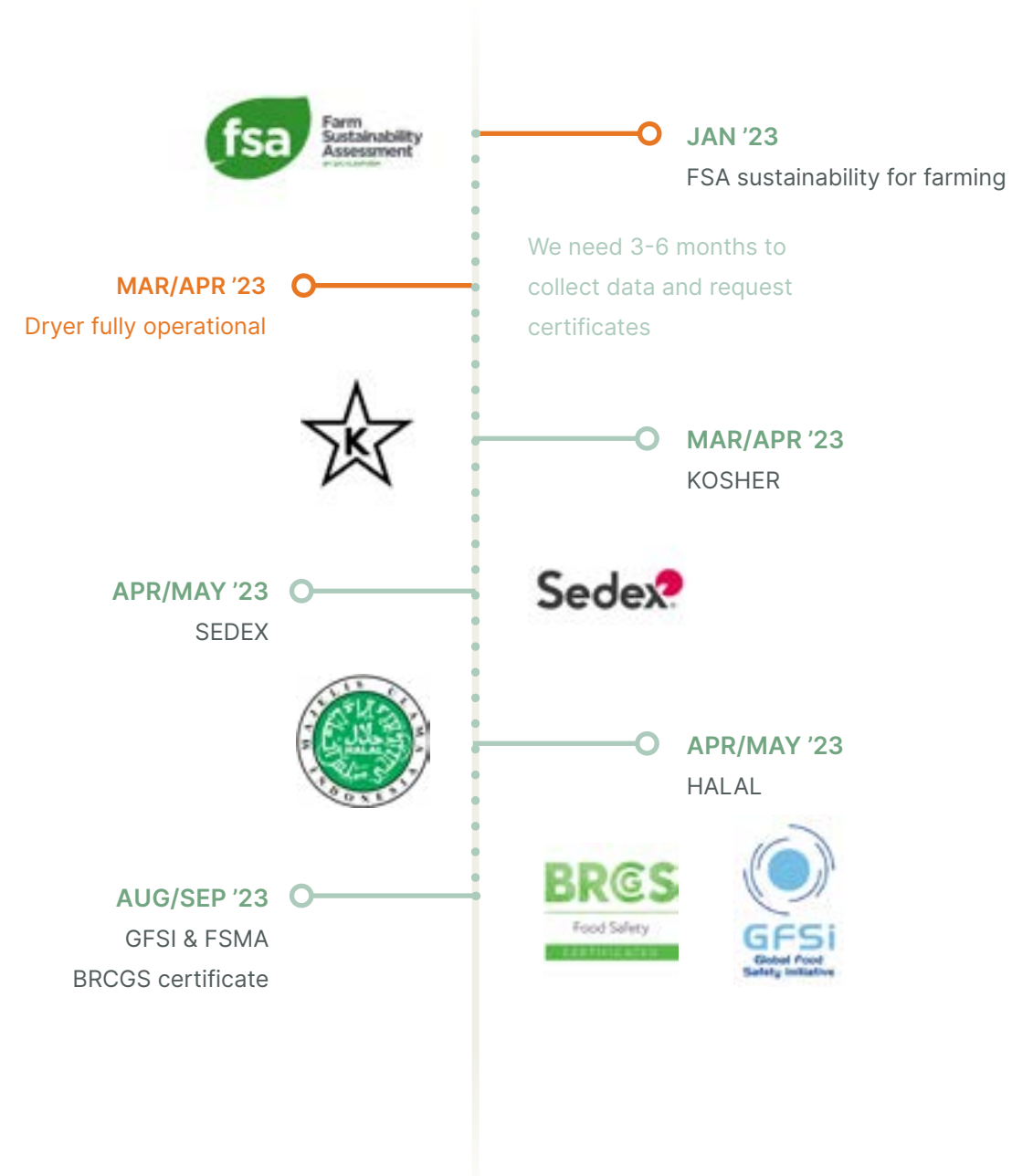
NEDSPICE

We are proud to contribute to a more sustainable supply chain.
But our first priority is to deliver high quality and food safe ingredients.
This starts at the farm level, but is continued throughout our supply chain.

All raw materials are sourced whole, inspected on arrival at our processing facility, cleaned and hand sorted, prior to entering the dehydration process. This way, we can guarantee the purity of the materials we supply.

In addition to this, the factory has the following third-party audits lined up: SEDEX, Halal and Kosher certifications, GFSI and FSMA, BRCGS certification and FSA. The audits for these certifications will take place after the factory

has been operating for three to six months. See the expected timeline below. Please note our Nedspice Dehydrated Ingredients sales office is accredited with grade AA BRCGS Agent and Brokers certificate.



Interested to learn more about our innovative dehydration factory?

Please contact your local sales manager or contact us at dehydrates@nedspice.com



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working together on
sustainable spicing

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