



# **CHROMOSOME DYNAMICS S.A.**

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3<sup>rd</sup> Quarter Financial  
Report 2022



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## General Information

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<b>3<sup>rd</sup> QUARTER REPORT acc to</b>	Law no. 24/2017 republished and FSA Regulation no 5/2018 as amended
<b>FOR REPORTING PERIOD</b>	01.01.2022 - 30.09.2022
<b>DATE OF THE REPORT</b>	November 24, 2022
<b>ISSUER</b>	CHROMOSOME DYNAMICS S.A.
<b>HEADQUARTERS</b>	București, Sector 6, Drumul Valea Furcii, Nr. 156-158, Bloc C1, Etaj 4, Ap. 24
<b>WORKSTATION</b>	București, Sector 6, B-dul Iuliu Maniu, Nr.6L, Campus 6.1, Birou 242, Et.2
<b>PHONE NUMBER</b>	0739.616.751
<b>EMAIL</b>	<a href="mailto:investitori@chromosome-dynamics.com">investitori@chromosome-dynamics.com</a>
<b>TAX PAYER NO.</b>	42234198
<b>NTRO REGISTRATION NO.</b>	J40/1800/2020
<b>TRADING STOCK MARKET</b>	MTS AeRO Premium
<b>SHARE CAPITAL</b>	122,491.8 lei
<b>MAIN CHARACTERISTICS</b>	612,459 shares with a face value of 0.2 lei / share
<b>TRADING SYMBOL</b>	CHRD

## Letter to investors

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Dear Investor,

Apart from positive financial result and sales by 31% higher than the numbers for the whole 2021 year, in the third quarter, Chromosome Dynamics marked a series of achievements, among which the following stand out: the launch of SpellBox Lite App, the start of the production of biostimulants and fertilisers in the new facility in Filiași, Dolj county, and the signing of two important contracts worth a total of EUR 455,000 for the supply of inputs made in our factory, revenues double the level we estimated in the first yearhalf Report. The improvement of SpellBox Pro has also been a priority for us, as we have succeeded in completing one of the most powerful agricultural crop diagnosis and monitoring tools in Europe by developing complex modules to generate reports on the condition of agricultural crops for farmers.

For Q4, we are preparing for the launch of Roosters Journey, an interactive game that will promote Romania's first agribusiness marketplace, Agrobazar.

As for Homeland, the first social networking and social empowerment network is in internal beta testing, with estimates for its official launch set between December 2022 and January 2023.

Homeland will make Chromosome Dynamics the first wholly Romanian-owned company to launch a social network in Europe.

Homeland will directly contribute to the promotion of our products and solutions in our own social network and will greatly reduce advertising costs.



In addition to this benefit, Homeland, through its tools, will generate revenue from advertising and in-app-purchase options, as it is conceived as an innovative promotional tool for both Chromosome Dynamics and companies in agribusiness and related fields.

It is important for our readers to understand that all the tools we currently have, are meant to, integratively, secure the entire business model, as they are designed independently but are strongly interconnected: the SpellBox diagnostic and monitoring application is tightly connected with the input factory, the input factory with Agrobazar, Agrobazar with Roosters Journey. We have strong assets at hand to ensure healthy growth, and although the current geo-political context is not a good one for any industry, Chromosome Dynamics has managed to grow and deliver very good results.

The entire Chromosome Dynamics team is confident that both our products and solutions will make a difference in the Romanian agribusiness market and will ensure the growth we aim, in line with the memorandum we presented before the AeRO listing.

I assure you, on behalf of the entire team, that we, Chromosome Dynamics, work with passion and seriousness and we are sure that the evolution of the company will meet your expectations.

We believe that the first three quarters of 2022 have been very good for Chromosome Dynamics, and we would like to remind you that the fourth quarter is one of the most important quarters for all agribusiness companies, as the majority of agro input and solution sales are contracted by farmers in the September - December timeframe.

We are currently in negotiations with several regional companies directly interested in purchasing inputs produced in the Chromosome Dynamics factory, which makes us excited and ambitious to work harder, deliver as expected and grow with you.

In closing, I would like to thank you, the investors, for the trust you have placed in us when investing in CHRD and for staying with us.

Yours sincerely

**Ionel Mugurel Gabriel**

CEO,

CHROMOSOME DYNAMICS SA

A handwritten signature in blue ink, appearing to read 'Ionel Mugurel Gabriel', with a large, stylized flourish extending to the left.



# **CHRD in the 3<sup>rd</sup> Quarter of 2022**

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On the Issuer

Business Lines

Sales and Development Of Agri Inputs In Q3 2022

Projects Updated - Q3 2022



## On the Issuer

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**Chromosome Dynamics S.A.** is an integrated agribusiness development and research business focused on innovative IT and AI solutions, which wants to reconfigure the processes, solutions and perspectives of farmers in Romania and abroad, by developing innovative solutions to support them by simplifying monitoring to all agricultural processes and by quickly providing the key to success in agriculture.

**CHRD vision**, in the context of the Romanian agricultural entrepreneurial space, is an integrative one, which has at its center an agribusiness sector served by revolutionary high-tech IT and AI solutions, to ensure the maintenance of the passion for agriculture and the correct remuneration of the participants in the agricultural processes.

**The mission of Chromosome Dynamics** is to support both women, at every step in their experience, as well as partner companies, through real, innovative and effective solutions, offered in the form of applications, high-tech hardware and software tools, product portfolios and consulting services in the agricultural field, in order to simplify the ways of communication and collaboration in agribusiness.

The management of CHRD has defined the **strategic objectives of CHRD**, which will ensure the competitiveness and dynamism that the highly competitive and challenging environment in both the agri and IT areas impose, as follows:

- ✓ Permanent development of innovative user-friendly high-tech IT and AI tools;
- ✓ Internationalization and making them available to farmers and enthusiasts in the field;
- ✓ Development of global solutions, aimed at simplifying human life (e.g. creation of superfoods, etc.);
- ✓ Maintaining the highest standards in terms of the quality of products offered on the market and consulting services in agribusiness;
- ✓ Careful and constant study of the market and customer needs, aiming at the continuous improvement of the services offered;
- ✓ Maintaining balance and well-being within the Chromosome Dynamics team by respecting all legal rights of employees and providing the best working conditions for them.



## Business Lines

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- 1. Consulting Services**
- 2. Integrative IT&AI Projects**
- 3. Direct sales of agricultural inputs**
- 4. The Factory of organic inputs, Chromosome Dynamics**

The current business model of the company Chromosome Dynamics S.A. already has a complex structure, projecting four main lines of activity that reinforce each other and intertwine, generating synergies and new opportunities for development:

**1. B2B consulting services** of specialized management for agricultural input agribusinesses in Romania that outsource certain specific management functions, including development of product portfolios for them in accordance with all European standards in force, through collaboration with research and development stations.

For its contractual partners, CHRD develops new product concepts, in collaboration with various research and development stations, in compliance with all relevant national and international norms and regulations. These services capitalize on the over 10 years of experience of the Chromosome Dynamics team in the fields of agribusiness and agricultural input management.

The consulting services are mainly addressed to companies distributing or producing agricultural inputs as well as to large farms that wish to outsource certain specialized agricultural management services.

The premise for the establishment and development of this division is the over 7 years of experience of the founder of the business and the general director of the Company in the development of product portfolios (fertilizers, fungicides, insecticides and organic biostimulants) for various partners - over 300 new products. The thorough research of the profile market requirements carried out prior to the activity of Chromosome Dynamics led to a natural path towards this field, embodied in the R&D division - agricultural inputs.

This activity generates income directly for the Issuer, by monetizing the experience and the know-how that the CHRD team makes available to its corporate clients





**2.** . Implementation, launch and monetization of **integrative IT&AI projects** that have the role of facilitating and dynamizing the interactions and cooperation between the various structures that make up the agro sector and related sectors such as the final consumer, the small farmer, large farmers, vendors and financiers. The ultimate goal is found directly in the mission of the CHRD and will be reflected in a significant contribution to the development of these sectors.

**3. The direct sale of agricultural inputs** is carried out through its own channels - Agrobazar Marketplace - and represents a considerable contribution of cashflow and profit. Agrobazar Marketplace is a way of promotion and direct sale of CHRD brand agricultural inputs, being, at the same time, an important source of cashflow by commissioning partner vendors within the platform (10% commission from successful monthly sales). Direct sales are also carried out through zonal and regional distributors for CHRD brand products or products made under our own brand.

**4. The Chromosome Dynamics organic inputs factory**, launched in the 3<sup>rd</sup> quarter, will deliver to retail, large farmers, but also retailers inputs needed for the spring 2023 campaign - pre-orders.

The range of products developed by the Issuer includes the following categories of inputs for organic and conventional agriculture, applicable in vegetable growing, fruit growing or large-scale crops, as the case may be:

- organo-mineral fertilizers;
- biostimulators;
- organo-mineral fertilizers for large crops;
- organo-mineral fertilizers for vegetable cultivation;
- biodynamic soil disinfectants;
- bioprotectors;
- insect suppressors

With a varied product portfolio, Chromosome Dynamics manages to cover all ranges of interest for farmers active in the organic as well as conventional farming system. The professional range consists of a number of *15 products designed for organic professional agriculture* (biostimulators, bioprotectors, insect suppressors, soil treatment, seed treatment), *10 products designed for small farmers with areas between 1-50 ha* (biostimulators, bioprotectors, insect suppressors, soil treatment, seed treatment) and *17 products designed for the hobby range* (biostimulators, fertilizers,



bioprotectors, insect suppressors, seed treatment). The CHRD range includes a total of *42 products*.

Chromosome Dynamics also produces inputs for several partners under their own brand. The total number of products manufactured for partners is 22 (for 3 partners).

The Chromosome Dynamics plant will begin generating revenue at the end of Q3 2022 and throughout Q4 2022. The production facility currently has the capacity to produce 60,000 liters per month and 30,000 doses of water soluble inputs per month. The total quantities of inputs produced in 30 days can cover up to 50,000 ha of agricultural land.

Chromosome Dynamics production facility has started to generate income and profit both through the sale of CHRD brand products, as well as through sale of products designed for Chromosome Dynamics partners of a total value of about EUR 500,000, which are to be delivered in December, 2022.

## **Sales and Development Of Agri Inputs In Q3 2022**

Chromosome Dynamics signed in the third quarter, two important agreements that contributed to the support of ongoing projects, as well as to the production activity in the CHRD agricultural input production facility.

The first contract signed between Chromosome Dynamics and one of its partners for the production of agricultural inputs (biostimulants and fertilizers) is of 1,000,000 lei, while the second amounts to 1,250,000 lei.

## **Projects Updated - Q3 2022**

Along July 2022 - September 2022, Chromosome Dynamics focused on the development of the most complex high-tech projects: SpellBOX (

a acordat atenție sporită dezvoltării celor mai complexe proiecte high-tech - SpellBOX (a diagnostic tool for diseases, pests, phytotoxicity and deficiencies in agricultural crops) and Homeland (social networking), while ensuring the smooth running of production (CHRD input factory) and distribution of agricultural inputs to maintain working capital. SpellBOX and Homeland are two projects that promise to be a real success for all parties involved in their development, representing important sources of future income for the company and a step forward towards the technologisation of agricultural processes, aimed at supporting farmers in practising sustainable agriculture.

Although ORGNit, Tortoise and Rooster's Journey were completed in Q1 2022, their launch was put on hold for objective reasons such as: geo-political situation, unstable economic situation at that time, overlapping with the spring agricultural campaign. Rooster's Journey will be launched in the near future and will be integrated with the Agrobazar marketplace (users will be able to purchase Chromosome Dynamics branded products after acquiring a sufficient number of Rooster's Coins), which will be a good instrument to promote both projects.

Please find below the current status for each project:

## SpellBOX

Chromosome Dynamics constantly researches the needs of farmers and generates innovative solutions to eliminate any impediment that appears during the process of cultivating the land. Farmers everywhere have always struggled daily to grow crops carefully. The uncertainty of actions taken to treat infested crops can have a major impact on yields, generating major losses. More often than not, due to errors resulting from incorrect telephone description and the long time it takes to get an appointment with a qualified consultant, farmers fail to properly treat the problem they are facing.

**SpellBOX** is one of the most complex Chromosome Dynamics brand projects. Initially thought of as a hightech device for the recognition of diseases and pests in agricultural crops, it has undergone major transformations over time, starting from the refinement of design and functionality (Fig.1), to the integration of satellite indices within the software to provide all the necessary information for complete control of the entire agricultural process. The main goal of the company by launching this project is to provide the best high-tech solution in order to technologize agriculture and how farmers shape responsible agriculture



Fig.1. SpellBOX

Our company had to make the best business model decisions in order to finally deliver on time a successful product that maintains the same main goal - to technologize the process of identifying and diagnosing diseases, pests, phytotoxicity and plant deficiencies. The hardware device is a complex one, and the production of SpellBOX boxes has been affected by the lack of electronic components (semi-conductor crisis), which has led to a considerable decrease in production capacity and delays in the delivery of the final product by partner manufacturers. Thus, Chromosome Dynamics has weighed all these factors that can influence the delivery of a complete service and, without affecting the promised results to end customers, SpellBOX will be delivered in the near future as a complex agricultural crop diagnostic and monitoring application with three benefit plans available.

Today, the mobile application SpellBOX Lite (Fig.2) is a software and diagnostic tool that allows users to detect, by simply taking a photo, diseases and pests in agricultural crops, with an accuracy of over 95%. SpellBOX Lite is the standard version of an innovative tool, created to confirm or identify impediments within agricultural processes and, therefore, to support farming enthusiasts in perfecting the application of the best tactics and large farmers in obtaining profitable productions. SpellBOX Lite comes to the aid of farmers with a robust disease and pest database with maximum accuracy, removing any human error related to the nature of the problem placed for analysis

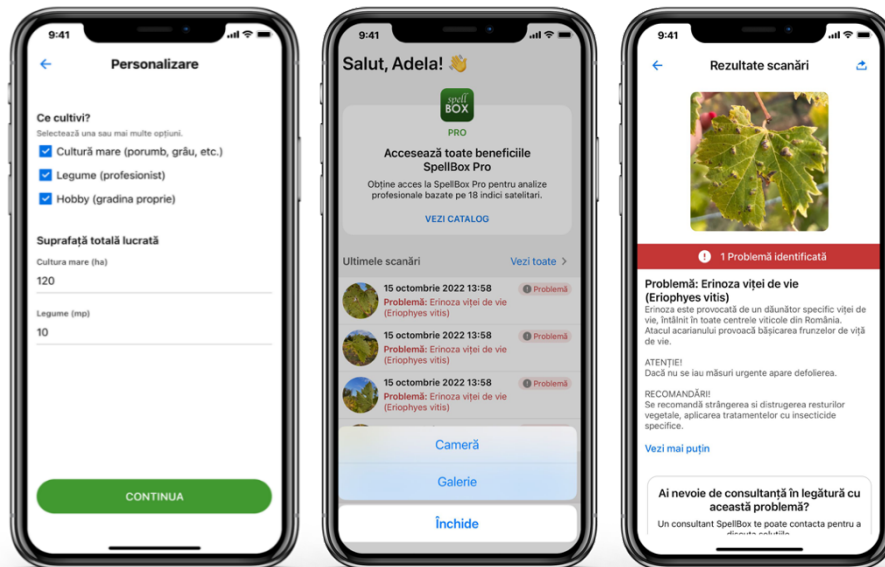


Fig.2. SpellBOX Lite App (from left to right: profile customization for promotional content targeting; main menu; result after executing a photo)



SpellBOX Lite is seen as a promotion channel for the Pro version of the innovative tool, but also a method to improve the Machine Learning module by collecting diversified data (such as disease/pest images, common problems in certain regions of the country). SpellBOX Lite is monetized by partnering with agricultural input distributors or specific services to provide targeted advertising. The mobile application is already available in AppleStore and MagazinPlay.

SpellBOX Lite is the first step in the technology of the traditional consulting process, users having the opportunity to access, through the application, the software and the high-tech device of the Chromosome Dynamics brand - SpellBOX Pro - which revolutionizes the way in which farmers can have access to the most important details in practicing responsible agriculture.

The decisive factor that differentiates the SpellBOX solution for practicing responsible agriculture from other tools on the market is represented by the introduction of the 18 satellite indices through which farmers have access to data such as: the health status of the agricultural crop through the precise identification of areas with live, diseased or death, helping to correctly estimate production and, in extreme cases, to make quick decisions on crop rotation (*NDVI - Normalized Difference Vegetation Index*); the moisture of the upper layer of the soil, informing the user about the optimal time for irrigation (*SMI - Soil Moisture Index*); monitoring areas with potential for flooding (*MNDWI - Modified Normalized Difference Water Index*); the level of plant growth according to their access to the light source (*LAI - Leaf Area Index*); the amount of chlorophyll present in the plants, allowing the detection of the nitrogen level and the prevention of risks related to the improper application of fertilizers (*CCC - Canopy Chlorophyll Content*).

Today, similar applications on the market deliver data that is difficult for the farmer to understand. SpellBOX thus becomes a most powerful tool for monitoring agricultural crops by providing a complete report, based on the **interpretation of 18 satellite indices**, on the health status of agricultural crops, together with corresponding recommendations. This report will be automatically generated by the SpellBOX platform directly in the user's account every 5 days. The report shown in Fig.3 is a first version designed by the Chromosome Dynamics team, which is continuously working on optimizing it to obtain the most understandable form of transmission of all the information about the user's agricultural crops.

The **Pro version** of the SpellBOX application offers the customer a package for complete monitoring of the agricultural process, by providing an agro-meteorological station and a digital pheromone trap. Thus, with the Pro version, SpellBOX becomes a modular platform that



connects multiple innovative IoT devices and brings together all the data needed to apply the best tactics for precision farming. Depending on the needs of each farm, customers can purchase additional IoT tools (agro-meteorological stations, digital traps, soil sensors, etc.) that are perfectly compatible with SpellBOX at preferential prices.



**Nume:** Popescu Ion  
**Oraș:** Bihor  
**Județ:** Bihor  
**Suprafața totală (hectare):** 10  
**Numărul de parcele:** 1  
**Culturi:** grâu

**Nr. raport:** 0000001  
**Data emiterii:** 14.10.2022  
**Perioadă raportată:** 9.10.2022-  
14.10.2022



**Raport săptămânal**  
nr. 0000001

Raportul actual pentru 1 parcelă înregistrată a fost realizat pe baza celor 18 indici satelitari de precizie (NDVI, EVI, SMI, NDWI, MNDWI, NDMI, LAI, FAPAR, CCC, CWC, MSAVI2, NDRE, NDREX, IRECI, MNDI, WIW, SOC\_VIS, SOC\_SWIR) și prezintă următoarele rezultate:

**Capacitatea părților verzi de a realiza fotosinteză**



**Parcela nr.:** fgdtb56h  
**Cultură:** grâu  
**Suprafață:** 10 ha  
**Conținut ridicat de clorofilă:** 42% din suprafață  
**Conținut mediu de clorofilă:** 2% din suprafață  
**Conținut scăzut de clorofilă:** 56% din suprafață

**% suprafață cu probleme: 56%**

**Atenție!** În sola fgdtb56h au fost detectate suprafețe în proporție de **56%** ce prezintă un conținut scăzut de clorofilă în plante. Acest lucru indică începutul unei carențe de azot. Recomandăm aplicarea îngrășămintelor bogate în azot pe suprafața detectată.

*Fig.3. Fragment of the complex report generated through SpellBOX software, with full interpretation of indexes and recommendations*

The SpellBOX Lite app (free app in AppleStore and GooglePlay) has already been downloaded 1500 times. SpellBOX will be promoted with the **Satellites** and **Pro** versions to farms where the company already delivers or will deliver agricultural inputs. Chromosome Dynamics expects the first revenues from SpellBOX in Q4 of this year.



With access to early warning, technologising the advice process and removing potential errors in the decision making process on applicable treatment plans to resolve the crop infestation problem as quickly and effectively as possible, Chromosome Dynamics is providing, through SpellBOX, a solution whereby farmers can know in advance, in detail, the problem they are facing, thereby reducing the downside of traditional agricultural advice.

## Homeland

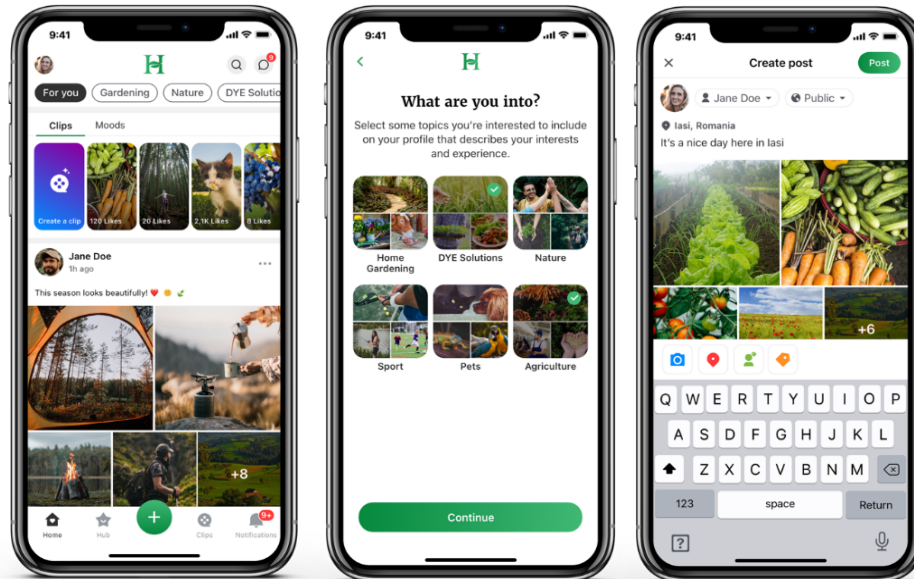
Homeland will be the first social network and social responsibility dedicated to all supporters of the conservation and protection of the natural environment. A good part of the content of the platform will be created by the users, who are also assigned a label of "*earthkeepers*", the continuous interaction between them with the final goal of generating content to outline and install the state of *environmental awareness*.

The Beta version of the social network will be launched during Q3 2022 and will include *all the modules present in the classic social networks* (story, chat, groups, etc.) (Fig.4), but also the interesting news module, which will include press releases and the latest news relevant to users, in order to optimize their activities. In addition, Homeland Beta will offer a chance to get information about the list of people who have recently accessed the user's profile by subscribing to the Homeland Pro version, which is also *one of the first methods of monetizing the social network*.

Subsequently, the distinctive element of the Homeland social network will be the system on which it is created, *gamified type*, which aims to motivate and actively engage users, by stimulating them with a series of components proving the degree of involvement of each one (cards, ranks etc.). The gamification of the social network, by creating an experience similar to that offered during games, is the strategic attempt to improve systems, organizations and activities within them, Homeland thus becoming the most important virtual environment for any supporter of the concept of environmental awareness.

The Homeland virtual space was created to bring together advocates for the conservation and protection of the natural environment, but also to support content creators in communicating a wide variety of activities, passions and ideas with other interested users. Homeland introduces the *Paid communities* section, which are groups open to all users, with the possibility of accessing premium content through a monthly subscription. Also, as a sign of gratitude, premium users have the opportunity to send

gifts of Raport financiar S1 2022 | 30.08.2022 17 various values (\$1/\$3/\$5) to the content creator (eg: flowers, cookies, chocolate, etc.). *Paid communities* generate income by users accessing paid/premium content, purchasing monthly subscriptions and offering gifts. Thus, Homeland comes into possession of a percentage of *20% of the total amount obtained monthly*.



*Fig.5. Homeland Beta Social Network (from left to right: feed page; choosing interests to receive personalized content; creating post)*

**The advantages** that Homeland brings to the community are represented by:

✓ The transfer of know-how between users at different stages of knowledge regarding the creation of events and concepts relevant to the original purpose; by facilitating the connections between them, the young generation or beginners have all the means of knowledge at their disposal, in all possible formats (video/audio/written/photo), to facilitate the success of their own projects;

✓ Fast and free communication, 24/7;

✓ Facilitating the formation of local or regional communities of users specialized in a certain related field, who can then meet offline and organize in different forms of association, in order to achieve common goals;

✓ The rapid spread, in real time, of news, rumors and agricultural events, users being constantly aware of everything that happens in their field of interest;





✓ Targeted marketing represents a real benefit for companies distributing products and services present in the application, avoiding the placement of unwanted advertisements by generating content from the users' field of interest.

The application is also intended to be an important tool with an educational role in training new generations in the sphere of environmental protection and, at the same time, a place where beginners learn and understand the complexity of the processes involved in making some beneficial changes on the environment. For professionals, the application represents a meeting space where they can set up various events or campaigns and have real-time access to the most important information in their area of interest.

CHRDA's will be the platform made available to companies interested in promoting themselves through Homeland, having access to the largest community of supporters of the concept of environmental Raport financiar S1 2022 | 30.08.2022 18 awareness. Monetization will be done in a Pay per view, Pay per click or Pay per conversion system, currently taking into account the development of HomelandPixel, in order to ensure the traceability of the advertising process.

All functions of the Homeland platform play a synergistic role, both for users and partner companies of Chromosome Dynamics, with the platform organically adapting to the demands and needs of all stakeholders, following a natural and evolutionary path, including in relation to the latest IT breakthroughs .

Homeland was released in Beta on September 15, and at the time of writing, the app is in the process of being bug-fixed. Homeland testing was conducted internally. Homeland version 1.0 will be released in December 2022. The Homeland social network will be free to download from the AppleStore and PlayStore.

## **Agrobazar**

At the beginning of 2021, Chromosome Dynamics S.A. started the process of establishing the largest multivendor agro-industrial marketplace in Romania. Currently, Agrobazar Marketplace (<https://www.agrobazar.ro/> + App) offers customers 12 categories of products intended to cover the entire agri-food sector, the portfolio



of items reaching 100,000 products from small producers to large distributors, such as Rodbun Group S.A., Adiss S.A., Eurostoc Online International, Norofert S.A. and Universal Tools Distribution.

The main purpose of the marketplace is to support and simplify the buying and selling process in the agrifood sector, focusing on creating a unique experience for each individual customer. Moreover, the marketplace offers the assurance of the best choices through free consultation and verification of each partner manufacturer or distributor.

In Romania, the Agrobazar international application, compatible with both the iOS and Android systems - interconnected with the innovative IT&AI software and hardware modules developed by the Issuer - represents Chromosome Dynamics' own sales channel. Thus, Agrobazar Marketplace represents, at the moment, a pillar project of the retail division, supporting both the company and the partners of Chromosome Dynamics through the sale-purchase system made available, but also through the promotion of innovative products and services for farmers, being an important source of capital. The internationalization strategy will involve its commodification "as-a-service", by making it available to local distributors of products from the Agro, Brico, Home&Garden categories, in exchange for a usage fee.

At the time of writing this report, Agrobazar Marketplace has generated sales of approximately 2.2 million lei, maintaining its position as a pillar project through constant capital injection.

## **The CHRD Agro Inputs Factory**

Chromosome Dynamics established a biostimulants and fertilizers production facility for conventional and organic agriculture in early 2022. With extensive experience in designing the input recipes needed for proper crop fertilization, the company provides the most effective products at manufacturer prices.

The Chromosome Dynamics factory has started to generate revenue and profit both by selling own brand products and products made for partners worth approximately 500,000 euros, with a maximum delivery date of December 2022.



## **ORGNit**

It is a complex hybrid physical-digital system that combines product security and traceability in such a way as to make counterfeiting impossible.

## **Tortoise**

It is a delivery app that aims to create an accessible link between independent agricultural producers and slow food restaurants and consumers who want food based on the highest quality, organic ingredients

## **Homeland**

Millennials and Generation Z are increasingly interested in agribusiness, prioritising improving practical and theoretical knowledge. A good proportion of today's young people are ambitious to take their family agri-food businesses forward or to set up and develop their own agri-business. Passion for agriculture keeps things moving forward in terms of the continued development of the sector, and young farmers are the key players in maintaining the level of excellence - both in Romania and internationally - in the sector. Therefore, Chromosome Dynamics will continue to pay attention to the implementation of recreational and educational virtual games, the latest project under development being an educational support game for users of all ages.

The first and current game, launched in December 2021, represents - through its graphics, sound and interactivity - an ideal virtual space for users who are passionate about casual, puzzle-type games.



At the time of writing, Rooster's Journey is set to launch the Rooster's Store, where users will be able to purchase Chromosome Dynamics-branded products after acquiring a sufficient number of Rooster's Coins. The launch of this version of the game will be in mid-December 2022.



# **Economic and Financial Analysis**

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Balance Sheet Analysis

P&L Analysis

Main Economic And Financial Indicators

Risks, Trends And Uncertainties

with potential significant impact on CHRD business

Board Statement



The financial information presented in this section is based on accounting reports prepared as of September 30, 2022, for the reporting period 01.01.2022 - 30.09.2022, unaudited.

## Analysis of CHRD financial position

Indicators	01.01.2022	30.09.2022	Δ% 30.09.2022 vs 01.01.2022
<b>Fixed Assets</b>	<b>570,123</b>	2,189,275	<b>+284%</b>
Non-tangible Assets	398,795	1,776,093	+345.4%
Tangible Assets	171,328	398,016	+132.3%
Financial Assets	-	15,166	-
<b>Current Assets</b>	<b>5,249,268</b>	6,447,526	<b>+22.8%</b>
Inventories	353,362	2,501,754	+608%
Receivables	3,479,699	3,890,336	+11.8%
Cash and cash equivalents	1,416,207	55,436	-96.1%
<b>Pre-paid expenditure</b>	<b>22,506</b>	347,228	+1.442.8%
<b>TOTAL ASSETS</b>	<b>5,841,897</b>	<b>8,984,029</b>	<b>+53.8%</b>
Current Debt	781,365	2,650,326	+239.2%
Long-term Debt	71,599	1,280,330	+1.688.2%
<b>Total Debt</b>	<b>852,964</b>	<b>3,930,656</b>	<b>+360.8%</b>
Provisions	43,117	-	-
<b>EQUITY, of which</b>	<b>4,945,816</b>	5,053,373	+2.2%
Share Capital	122,492	122,492	-
Equity Premiums	3,830,478	3,830,478	-
Reserves	24,498	24,498	-
Retained Result	16,741	968,348	+5.684.3%
Reporting Period Result	976,065	107,557	-89%
Profit distribution	24,458	-	-
<b>TOTAL EQUITY AND DEBT</b>	<b>5,841,897</b>	<b>8,984,029</b>	<b>+53.8%</b>

The dynamics of Chromosome Dynamics' financial position in the reporting period reflect the path the business is naturally taking in the course of implementing management's strategy, which follows the vision for accelerated and multi-faceted growth that has been assumed and conveyed since the early rounds of raising capital.

The increase with 3,142.1 thousand lei in the value of the company's **total assets** by 53.8% compared to the beginning of the year was 51.5% due to the increase in the value of fixed assets, while the increase in the value of current assets contributed 38% to this dynamic.



**Non-current assets**, representing 24.4% of total assets, increased their value supported by the gradual capitalization, at the level of intangible assets, of investments in the development, execution and completion of key information technology intensive projects, such as ORGNit; SpellBOX, Homeland, Turtuoise, Rooster's Journey, etc. The value of **intangible assets** thus increased by 1,377.3 thousand lei (+43.8%) during the reporting period.

The value of **tangible assets** increased by 132.3% (226.7 thousand lei) as at 30.09.2022, compared to 01.01.2022, mainly due to the investment in means of transport in the amount of 459.1 thousand lei, offset by adjustments from depreciation of these assets but also from disposals / scrapping in the amount of 126.2 thousand lei. Investments in tangible assets other than means of transport amounted to RON 26.8 thousand.

The balance sheet category of **current assets** decreased its share in total assets from 89.9% at the beginning of the financial year to 71.8% on 30.09.2022, although their value increased by 22.8%, i.e. by 1,198.3 thousand lei, to 6,447.5 thousand lei.

The largest share in current assets is held by **receivables** (60%), whose value increased by 11.8% - a favourable dynamic for Chromosome Dynamics, given that it generated a turnover in the same period of 6,076.9 thousand lei, 31% higher than the turnover for the whole of 2021 and 2.3 times higher than the sales value for the first 9 months of 2021. Trade receivables represent 95.7% in the total value of receivables.

**Inventories** experienced the largest increase, among current assets, in the reporting period, their value increasing by 2,147.4 thousand lei, i.e. 7 times compared to the beginning of the year, while their share in current assets increased from 6.7% at the beginning of the year to 38.8% as at 30.09.2022. The dynamics of inventories was driven by the increase of goods inventories by 1,689.9 thousand lei and raw materials inventories by 451.7 thousand lei, which is an expression of the intensification of distribution activity through Agrobazar and the start of production of agricultural inputs for retailers, partners and farmers.

Naturally, with the development of the business through investments in technology-intensive projects and promotion, but also with a prudent stock policy, the value of **cash and cash equivalents** decreased by 96.1% compared to the beginning of the year.

**Prepaid expenses**, a balance sheet item that totals the amount of expenses already incurred with software development and the completion of applications that will be capitalized as intangible fixed assets in the coming period, increased by 324.7 thousand lei compared to the beginning of 2022.

The Company's assets are **56% financed by own funds**, while **short-term debt provides 30% of working capital requirements** and **the long-term debt contributes by 14% of Chromosome Dynamics' liabilities**.



The 53.8% increase in the value of the Company's liabilities was primarily due to **short-term debts**, which increased 3.3 times during the reporting period, i.e. by 1,869 thousand lei, mainly due to trade debts (supplier credit), the value of which increased by 1,928.3 million lei. This evolution is in line both with the increase in distribution activity and with the policy of some contractual clauses used in the relationship with traditional partners with dual quality, supplier-customer, mutual-benefit parties.

The increase in **long-term debt** by 1,208.7 thousand lei was primarily due to the bank loan of almost 1 million lei, maturing on 23.05.2025.

The value of **equity** increased significantly (+2.2%) as at 30.09.2022, compared to 01.01.2022, the increase of 951.6 thousand lei in the retained earnings at the end of 2021 being offset by a result for the period of 107.6 thousand lei, 89% lower than in the previous year, against the background of the intensive investment profile characterizing the reporting period.

*As stated in the half-year report, management's expectations for the end of the current financial year remain unchanged.*

## Analysis on CHRD Financial Performance

Indicator	30.09.2021	30.09.2022	Δ%
<b>Operational Turnover</b>	2,689,040	6,188,756	+130.2%
Net Sales, of which	2,680,008	6,076,901	+126.8%
- Products sold	2,368,033	2,761,604	+16.6%
- Goods sold	318,397	3,403,102	+968.8%
- Granted discount	6,422	87,805	+1267.3%
Revenues related to the cost of production in progress	429	3,336	+677.6%
Other operational revenues	8,603	108,519	+1,161.4%
<b>Operational Expenditures</b>	2,643,856	5,958,926	+125.4%
Expenditure on raw materials and consumables	193,485	117,065	-39.5%
Other material expenditure	15,551	78,444	+404.4%
Expenditure on energy and water	1,581	8,435	+433.5%
Expenditure on goods	1,048,496	2,800,647	+167.1%
Staff expenditure	571,989	1,087,671	+90.2%
Expenditure on adjustment of value of fixed assets	48,485	273,089	+463.2%
Other operating expenses, of which:	859,458	1,661,379	+93.3%
Expenditure on external services	807,987	1,546,264	+91.4%
Other taxes, duties and similar charges	3,173	18,279	+476.1%
Environmental protection expenditure	-	77	-
Other expenses	48,298	96,759	+100.3%





Expenses on provision adjustments		(43,117)	-
<b>Operational Result</b>	45,184	229,830	+408.7%
Financial Revenues	269	6,932	+2,476.9%
Financial Expenditures, of which:	12,688	22,439	+76.9%
Interest	3,642	7,591	+108.4%
Other financial expenses	9,046	14,848	+64.1%
<b>Financial Result</b>	(12,419)	(15,507)	-
<b>Total Revenues</b>	2,689,309	6,195,688	+130.4%
<b>Total Expenditure</b>	2,656,544	5,981,365	+125.2%
<b>Gross Result</b>	32,765	214,323	+554.1%
Tax	25,243	106,766	+78.9%
<b>NET RESULT</b>	7,522	107,557	+1,329.9%

In Q3 2022, Chromosome Dynamics continues to accelerate the monetization of products generated from completed and launched projects with increased sales through the Agrobazar marketplace and consulting activity to large and medium-sized agricultural producers. As a result, as at 30.09.2022, **net turnover marks, for the first nine months of 2022, an increase of 127% compared to the same period last year, while total operating revenues increase by 130%.**

Structurally, the category with the highest share in turnover (56%) remains the revenue from the sale of goods - through Agrobazar marketplace and direct distribution, while the value of production sold and B2B consulting services provided to partners contributed 45.4% to turnover.

Other operating income mainly includes income from the disposal of assets amounting to 69.3 thousand lei, but also income from damages and penalties amounting to 37.7 thousand lei.

It is significant that, in the reporting period, the turnover **exceeded by 31% the level reported as at 31.12.2021 for the entire previous year.**

As a result, **operating revenue** in the reporting period increased by 3,499.7 thousand lei, i.e. by 130.2% compared to the reference period (30.09.2021).

In the reporting period, **Operating expenses** increased compared to the same period of the previous year (reference period) at a lower pace than revenues (+125.4%), thus generating an increasing gross operating profit margin, reaching almost 4% as at 30.09.2022. Given that the period of intense investment in project execution and promotion entails expenditure that will generate revenue in the coming periods, management estimates that this profit margin dynamic will continue on a steeper slope.

The company's main expense category is **expenses on goods**, accounting for 47% of operating expenses, which increased by 167.1% in H1, mainly due to increased distribution activity through marketplace and direct distribution through sales partners.



**Expenses with external services**, amounting to 1,546.3 thousand lei as at 30.09.2022 and accounting for 26% of total expenses and 93.1% of *Other operating expenses*, include the value of promotion services, market prospecting consultancy, lease administration, occupational medicine, maintenance and repair of premises, premises protection, accounting, internet and telecommunications, phytosanitary and environmental protection analyses, etc.

Chromosome Dynamics continued to invest in the promotion of its brands, products and services, so that the **expenses for promotion and advertising**, amounting to 673.5 thousand lei, amount to 2.7 times the amount for the reference period (30.09.2021) and exceed by 41% the budget allocated for the entire year 2021. With the intention to support projects in which we believe, but also as an additional tool for promotion, in the first nine months of the year the Company granted sponsorships worth 9.7 thousand lei, almost 4 times more than in the reference period.

The dynamics of **Personnel expenses**, a category accounting for 18.3% of total operating expenses, was due to the increase in CHR D's team from 10 to 17 people (+70%), naturally driven by the development strategy.

**Financial revenue**, amounting to 6,932 lei, was generated 72% by favourable exchange rate differences (4.9 thousand lei) and 28% by other financial revenue (1.8 thousand lei). These, combined with **financial expenses** amounting to 22.4 thousand lei, of which 37.3% represent expenses from exchange rate differences, 34% interest expenses and 29% other financial expenses, led to a **negative financial result** of -15.5 thousand lei.

The **net result** as at 30.09.2022, is **positive**, amounting to 107.6 thousand lei and on the growth trajectory that Chromosome Dynamics management has predicted and pursued tenaciously since the launch of its vision and business model. We consider the relatively low level to be natural for this period of intense simultaneous investment efforts across all business lines, which we expect to generate increasing revenues in the coming period.

*Profitability growth will be boosted by the business model that systemically and synergistically brings together several business lines that leverage and serve each other towards the realisation of the development strategy.*



## Main economic and financial indicators

<b>Liquidity, solvency and risk indicators</b>	<b>Reference levels</b>	<b>01.01.2022</b>	<b>30.09.2022</b>
Current Ratio	>2	6.7	2.4
Quick Ratio	>1	6.3	1.5
Cash Ratio	>0,5	1.7	0.02
Assets / Debt Ratio	>1	6.8	2.3
Equity / Liability	>30%	85%	56%
Long-term Debt / Permanent Capital	<50%	1%	20%
Debt Ratio (Total Debt / Total Assets)	<80%	15%	44%

The broad picture of main economic and financial indicators depicts a balanced medium and long-term financial position and a comfortable level of current and immediate liquidity.

In the context of the interpretation of the liquidity indicators, we again underline the particularities of the business model, where receivables and payables offset each other to a significant extent and payment terms - in relation to suppliers but also to customers - are often negotiated for relatively long periods. It should also be noted that, at the end of the reporting period, the company has no overdue debts.

In conclusion, given that debts falling due within one year are covered 2.4 times by the amount of receivables and that long-term debts contribute only 20% to the company's permanent capital, we can confidently state that Chromosome Dynamics' ability to meet its obligations to third parties - short and long-term - on its own assets is satisfactory and the level of risk associated with the degree of indebtedness is relatively low.

<b>Profit Ratios</b>	<b>30.09.2021</b>	<b>30.09.2022</b>
Operational Gross Profit MRgin	1.7%	3.8%
Net Profit Margin	0.3%	1.8%

Although still relatively modest, profit margins outline a positive, upward trajectory that will continue through the tireless, tenacious and determined efforts of the Chromosome Dynamics team.



## **Risks, Trends And Uncertainties with potential significant impact**

The geopolitical and macroeconomic context will continue to impact the company's business, with recent hyperinflationary trends and uncertainties in the energy sector, supply logistics systems, affecting the entire ecosystem of CHRD's business.

Therefore, Chromosome Dynamics' management believes that there is a certain risk that, given the intensification of the current challenges, some of the business lines will be affected, without, however, its materialization dramatically influencing the company's activity. Direct risks may be related to the availability of partners to purchase services (e.g. ORGNit) or the availability of certain raw materials. Management also takes into account the risk of price increases for finished products and raw materials impacting the profitability of the company.

As in the previous period, the company's financial liquidity is supported by the contracts concluded with CHRD's partners which involve the mutual settlement of debts in return, i.e. through services or products provided by the parties to each other.

At the time of the report, the Company's management maintains its estimates of results and performance at levels close to those described in the memorandum for the admission to trading of CHRD shares published on 05.05.2022 respectively as per the Issuer's income and expenditure budget approved by the AGM held on 11.04.2022

## **Board Statement**

Hereby, the undersigned Ionel Mugurel-Gabriel, as Sole Administrator of Chromosome Dynamics S.A., issuer of financial instruments admitted to trading on the Multilateral Trading System administered by the Bucharest Stock Exchange, declare that, to the best of my knowledge, the half-yearly financial statements of CHROMOSOME DYNAMICS S.A., drawn up as at 30.09.2022 in accordance with the accounting standards in force, reflect a true and fair view of the company's assets, liabilities, financial position, income and expenses, and the Sole Administrator's report, published on 24.11.2022 in accordance with the assumed financial calendar, correctly and completely presents information about the issuer in its essential aspects.

Bucharest, November 24, 2022

Sole Administrator,  
**IONEL Mugurel-Gabriel**