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## EDITORIAL

## Scroungers

Ahlam NAZIH

**H**AS inflation finished creating nightmares for households and governments? Analysts expect deflation to continue this year. But nothing is less certain.

In Morocco, households have rediscovered inflation through two years of exceptional peaks. In 2022, the country recorded a rate of over 6% (exactly 6.6%), a level not seen since 1995. For 2023, the forecast was for a much lower rate, betting on a lull in commodity prices and a drop in demand linked to the rise in the key interest rate. In the end, these predictions were proved wrong. The year 2023 closed with an inflation rate, measured mainly by the consumer price index, of 6.1%, according to the High Commissioner's Office for Planning (HCP) (12.5% for food products). This is a heavy blow for an economy whose growth is largely driven by domestic consumption. For the same year, the national statistics pro-

ducer had predicted an inflation rate measured by the GDP deflator of just 1.9% (published in January 2023). In the end, the rate was 4.5%. For 2024, the HCP expects 2.8%. However, once again, nothing is certain.

Geopolitical tensions continue to mount. Prices for sea freight (which accounts for more than 80% of world trade) have already rocketed due to Houthi attacks in the Red Sea, and drought is still with us... And «freeloading» operators continue to take advantage of the situation to impose disproportionate prices.

The fight against inflation cannot be limited to raising the key interest rate and dissuading demand. Direct aid to the most vulnerable households could ease their burden somewhat. However, it is imperative to activate new levers, starting by blocking the way to the scroungers who make their money on the back of households. □



## Weekly highlights

# Renewable energies: A boost for investment

**E**NCOURAGING private investment in renewable energies was the subject of an oral question in the House of Councilors. The Minister of Energy Transition and Sustainable Development considers that since 2021, investment in renewable energies has accelerated, through the reinforcement and development of the national electricity grid. Meanwhile, Morocco has accumulated a total renewable energy capacity of around 4.6 gigawatts. This includes 1,853 megawatts in wind power, with an investment of almost 30 billion Dirhams (USD 3 billion), and 852 megawatts in solar power, with an investment of around 30 billion Dirhams. In addition, 1,770 megawatts of hydroelectric power were built before the launch of the national energy strategy in 2009. 60 billion Dirhams (USD 6 billion) have been invested in renewable energy projects since the launch of this strategy, noted Leila Benali. Half of all wind energy projects, for example, have been developed by the private sector. According to her, the acceleration in the pace of investment in renewable energies and



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in the electricity grid is part of the National Electricity Equipment Plan. This involves additional capacity of up to 9,614 megawatts by 2027, of which 7,516 megawatts will come from renewable energy sources, for an investment of almost 75.16 billion Dirhams (USD 7.5 billion). Investment in renewable energy projects under the 2023-2027 electricity plan will experience a quantum leap,

with annual investment quadrupling compared with the 2009-2022 period. To stimulate and encourage investment in renewable energies, particularly for small businesses, important regulatory texts have been published, notably for the development of decentralized production. New initiatives have been launched to boost investment in the renewable energies sector, particularly by the private sector. The

Minister announced the start of implementation of a program to supply industrial zones with clean, renewable electricity. Authorizations have been granted for two projects to supply the industrial zones of Kenitra and Tangiers, with a capacity of around 150 megawatts. Other projects are also being considered to supply other industrial zones nationwide. □

Mohamed CHAUI

## Water stress: The new roadmap

**R**ECENT rainfall has boosted reservoir stocks, with inflows of around 646 million cubic meters from September to date. Despite this, the filling rate of dams has not exceeded 23.2%, compared with 31.7% last year. Today, water resources are estimated at 3.7 billion cubic meters, compared with 5 billion cubic meters last year. These rains, recorded in several regions, have reduced the water deficit from 70% to 57% compared with ordinary years, and to 37% compared with last year. These data were provided by Nizar Baraka during the question time session of Monday January 22, 2024 at the House of Representatives. Moreover, the Minister noted that the working meeting chaired by His Majesty the King had enabled a new roadmap to be put in place to tackle these issues. In this context, he announced the start of operations at the new Tiddas and Toudgha, Fask, and Agdès dams. This year, the Ghriss, Amdaz, and Koudiat



*According to Nizar Baraka, the latest rainfall has boosted dam stocks, with inflows of around 646 million cubic meters from September to date*

Barna dams at Sidi Kacem will be put into operation, and work on thirteen other dams currently under construction will be accelerated. To exploit water from dams with dwindling stocks, he plans to install floating pumps to be able to use this water for agriculture and drinking water supply.

The Minister also discussed the acceleration of seawater desalination, in particular the Casablanca station, which will be launched in the coming weeks. The Minister also mentioned the Sidi Ifni station, which will be completed this year. The Dakhla station will be ready in 2025. The Agadir station will

be expanded in 2026. In addition, 9 stations will be launched this year or early next year, he noted.

As far as mobile desalination stations are concerned, Nizar Baraka provided some indications. Morocco has more than 42 units in use and 20 new ones in the process of being purchased. The same goes for the three 100-liter-per-second mobile stations to be supplied to Taghazout and the north of Agadir. Brackish water treatment plants will be built in Kalaât Sraghna, Zagora, Taza, Sidi Kacem, Boujdour, Khénifra, Settat, Berrechid, Tinghir, and Tan-Tan. Others will be made available in the Al Hoceima areas.

Drinking water will be supplied to rural areas by 700 tanker trucks.

In addition to these measures, the Minister of the Interior has issued a circular requiring a weekly meeting to be held to assess the water situation in each province. □

Mohamed CHAUI



## L'Economiste-Sunergia survey

# Water, electricity... The match between cities

**R**EGIONAL multi-service companies will soon be taking over the distribution of water and electricity. When presenting the new system, the Ministry of the Interior explained that the aim is to set up economically viable entities, with a view to mobilizing financing, particularly for investment. This is because the management approaches adopted to date would not make it possible to respond effectively to the sector's needs, given the lack of coordination and the tangle of intervention networks. On the ground, monitoring and evaluation operations have shown that the performance of the water and electricity sector is confronted with a series of problems within the framework of current management experiments, it is indicated. The situation varies from region to region, depending on how these utilities are managed. These are the findings

### What about electricity?

**W**HEN it comes to electricity distribution, Moroccans' opinions seem to be fairly similar, insofar as in several cities the same companies manage both services. Overall, 67% of Moroccans are satisfied with the company that manages electricity in their city, 39% of whom are very satisfied. Here too, the highest levels of satisfaction are found in cities such as Kenitra, Meknes, Marrakech, and Fez... As is the case for with water, users of the Rak utility (in Kenitra) are the most satisfied. Only 9% are dissatisfied or very dissatisfied. By contrast, for the Amendis utility (in the North of Morocco), only 15% are very satisfied or satisfied. Dissatisfaction levels also remain fairly high in Rabat (Redal utility) and Casablanca (Lydec utility), at 32% and 40% respectively. □

of the latest L'Economiste-Sunergia survey. Respondents were asked about their level of satisfaction with the company managing water distribution in their cities. Overall, 67% of Moroccans said they were satisfied, 38% of whom were very satisfied. In detail, the highest levels of satisfaction were found in cities such as Kenitra, Meknes, and Marrakech. In the latter, 55% of respondents were very satisfied with the Radeema uti-

lity's management, and 29% were satisfied. Only 16% were very dissatisfied. In cities like Casablanca and Rabat, the situation is more nuanced. In Casablanca, 28% are very satisfied with Lydec's management and 37% are satisfied, while 34% are dissatisfied or very dissatisfied. In Rabat (Redal utility), 26% of respondents were very satisfied and 43% were satisfied, while 32% were dissatisfied or very dissatisfied. Responses were

more clear-cut for water distribution management in the north (Amendis utility). 56% are very dissatisfied and 29% are dissatisfied, while only 14% have a different opinion. This contrasts with Larache (Radeel utility), where all respondents were very satisfied. This statistic should be treated with caution, however, given the small number of respondents in this city. □

M.A.M.

## Judicial map

# Transition in the courts

**D**ESPITE the entry into force of Decree no. 2.23.665 on the Kingdom's new judicial map, published in Official Gazette No. 7260 on December 28, not all the new courts will be operational immediately.

The President of the High Judicial Council has just sent a note, dated January 19, to the presidents of all the courts, informing them of the implications of the new judicial reorganization and of the procedures for its implementation. These include the courts of first instance in Bouznika, Tahannaout, Chichaoua, El Hajeb, Erfoud, Rich, Biougra, Assa-Zag, Boujdour, Mdiq, Demnate and Jerada. The same applies to the commercial courts of first instance in Laâyoune, Dakhla and Beni Mellal, and the administrative courts of first instance in Laâyoune, Dakhla, Tangiers, and Beni Mellal. Other jurisdictions remain on stand-by pending the appointment of judicial officials, such as the Dakhla court of appeal, and the commercial courts of appeal in Tangiers, Agadir, and other cities. As a result, these courts will not be able to offer their services to litigants



and users immediately. In the meantime, the geographically competent courts are required to manage the transition. To do this, they will have to continue hearing cases that should normally be handled by the new entities. In short, they are called upon to continue offering their services to users as usual until further notice. The President of the High Council of the Judiciary is also urging the First Presidents of the Courts of Appeal and of the Courts of First Instance to

ensure that the provisions of the decree are properly implemented. The aim is to safeguard the rights of litigants and users, particularly in terms of procedural certainty in decision-making. At the same time, the President of the High Council is urging court presidents to inform magistrates under their authority about the content of his circular and about the new features of the decree on the new judicial map, by organizing meetings where necessary to explain the prin-

ciple governing the reform. The presidents are called upon to manage the implications of the new judicial map, which entails the abolition of certain jurisdictions and the reorganization of the geographical perimeter of other jurisdictions, in accordance with the procedure laid down by the legislative provisions, so as not to penalize litigants and ensure that judicial time is preserved. □

Hassan EL ARIF



## Weekly highlights

# Eight Moroccan AI talents in top laboratories

**M**ANY Moroccan research talents are working in international laboratories. Benefiting from conditions that enable them to excel, they are enjoying successful careers. Among them are eight promising young researchers working in the field of artificial intelligence (AI). They will be meeting next February in Benguerir, as part of the Science Week organized by the Mohammed VI Polytechnic University (UM6P), where they will present their work.

«These researchers were not selected at random. They have achieved an extraordinary feat: that of having a scientific paper accepted at the most prestigious AI conference in its modern form: NeurIPS», notes Rachid Guerraoui, who will bring these young researchers together in the event's «Computing day» on February 13. Guerraoui, Director of the Distributed Computing Laboratory at the Ecole Polytechnique Fédérale de Lausanne (EPFL), is himself among the world's top 2% of science researchers, according to Stanford University's 2020 rankings. «It is as if they had been selected for Wimbledon in tennis or for the World Cup in football», he says. And with good reason: Neurips is where the most advanced results in machine learning from both academia and industry are unveiled. «This is where new AI techniques are presented, making it possible to predict diseases, forecast natural disasters, invent new medicines, drive a driverless car, and so on. It is also where new versions of ChatGPT are presented», explained Rachid Guerraoui.

The eight young talents work in some of the world's leading laboratories (see illustration), including those at the Massachusetts Institute of Technology (MIT), the Montreal Institute for Learning Algorithms (MILA), the Ecole Polytechnique Fédérale de Lausanne (EPFL), the Ecole Polytechnique Fédérale de Zurich (ETHZ) and the Ecole Nationale de la Statistique et de l'Administration Économique (ENSAE, Paris).

«**Reinforcement learning**»,  
«**trustworthy machine learning**»...

They are positioned in cutting-edge specialties, and work on cutting-edge research themes. Yassir Jerda (MIT), for example, specializes in compu-



Yassir Jedra  
(MIT)



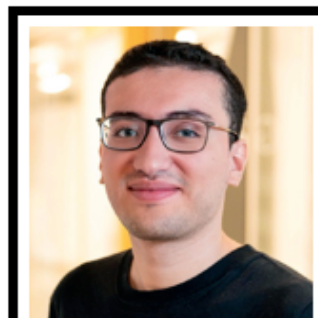
Youssef Allouah  
(EPFL)



Hamza Keurti  
(ETHZ)



Lena Nehale Ezzine  
(MILA)



Ghait Boukachab  
(MILA)



Oussama Boussif  
(MILA)



Salem Lahlou  
(MILA)



Ziyad Benomar  
(ENSAE)

ter science and applied mathematics (algorithms, optimization, and control systems). He graduated in engineering from Ensimag in Grenoble, with a double degree from the Royal Polytechnic School of Stockholm (KTH). And it was at KTH that he completed his PhD in reinforcement learning. Today, Yassir Jerda is a post-doc at MIT, where he is conducting research into reinforcement learning. «This type of learning is applied in many fields, such as robotics, medical treatment, and recommender systems, among others. In a few words,

the aim of my research is to analyze and develop learning algorithms capable of interacting with complex environments, using as little data as possible», explained the young researcher. His ambition is to embark on a career as a teacher-researcher in the field of machine learning.

Youssef Allouah is a PhD student in computer science at EPFL. He describes himself as «a theoretician by training, at the intersection of computer science and mathematics». His field of research is «trustworthy machine

learning». Here, the young doctoral engineer develops algorithms that are robust to manipulation, can be proven, and preserve the confidentiality of their users' data. His passion is research, which he hopes to continue. In academia or industry? He hasn't made up his mind yet.

Some of these young talents have passed through the Lydex preparatory courses in Benguerir, like Oussama Boussif, currently attached to the MILA Institute. □

Ahlam NAZIH

## AI will change our lives!

**H**OW will AI evolve over the next few years? For Yassir Jerda (MIT), it is clear that AI will change our lives, both socially and in the workplace. «We're already seeing AI-based tools like ChatGPT that have become indispensable in the day-to-day work of programmers», says the young researcher to illustrate his idea. For him, AI will also play a major role in future scientific innovations, particularly in fields such as medicine, biology, physics, and even mathematics. «We can already cite a few examples, such as AlphaFold from DeepMind (a Google subsidiary), which predicts the structure of proteins from their amino acids alone, or, just recently, Alphageometry, also from DeepMind, making it possible to solve fairly complex geometry problems, at the level of the International Mathematical Olympiad», added Yassir Jerda.

For Youssef Allouah (EPFL), AI, which is attracting an increasing number of talented researchers and entrepreneurs, some of whom have branched off from their original fields, has a bright future ahead of it. Nonetheless, «there will inevitably be problems of reliability and regulation as AI is deployed on a large scale. Our research is ideally placed to support this deployment», he concluded. □

