

**PMAC weekly update 18th to 24th June**

1. **Government agencies**: OPI Pest list changes; WTO Notifications; WCO3 Mandatory Date – 9 days to go
2. **New Zealand News:**  New Zealand and EU formally launch free trade talks; Horticulture rumbles on; NZ biosecurity top - scores in KPMG agribusiness survey**;** Exclusive avocado access to Australia under threat; NZ is missing a trick when it comes to export marketing; New Zealand organic farm fined $45,000; Natalie Davis- new head of Countdown; Skincare made from kiwifruit puts Bay of Plenty on the map
3. **International news:** GAIN reports; European Parliament; Trump trade talks create crisis of 'unimaginable proportions'; Things China was going to buy more of ...; Latest US-China Trade Tensions Will Impact US Produce Trade; Trump Administration Considering 'Tariff Payments' to Farmers; New Australia digital trading platform; Antwerp blockchain pilot pioneers: Secure and efficient document workflow; Breaking the ‘vicious cycle’ of food, climate and nutrition; The influence of IoT: How it’s transforming global logistics; Fruit and vegetables linked to changes in skin colour; Creating intelligent plants with botanical sensors

***Editors comments***

*The most important New Zealand news this week is the findings of the KPMG Agribusiness Agenda. Not surprisingly Biosecurity is again primary industries top concern. But worryingly where last year’s agenda was about opportunities in global markets, this year’s theme was weighted towards a range of domestic issues. The Agenda notes that primary industries predominantly negative media coverage despite agri-food continuing to dominate New Zealand’s export revenues. Mr Proudfoot states that all New Zealanders have contributed to the countries environmental degradation and the unbalanced narrative surrounding primary industries is no longer an inconvenience or annoyance but was putting the sector at risk and needs to be addressed. This is an important issue and one that must be addressed if opportunities to grow horticulture are allowed to progress.*

*Two areas dominate the international section. Firstly Trumps tariffs against China ( and the possible fallout) . There are 4 articles here that explore the future. Secondly blockchain and data management . New Zealand’s electronic phytosanitary certificates are being used as the start of a blockchain scheme to facilitate products quick movement into Europe via the Port of Antwerp. Another article talks about the potential in the Internet of things (IoT) IoT applications can collect a vast variety of data types, share it quickly across multiple trading partners, and integrate many sources of information in innovative ways to enable better decision making. The article states it is up to each industry to determine what types of data should be combined and integrated to create the best environment for business growth and efficiency.*

1. **Agency news**



* 1. **OPI Pest list changes**

In MPI’s [Registers & lists](http://mpi.govt.nz/exporting/food/fruit-and-vegetables/registers-and-lists/) the Australian Offshore Pre-shipment Inspection (OPI) pest list has been updated with the following:

* *Typhlodromus musero* status changed from non-actionable to actionable;
* *Neocalvolia* spp.  status changed from actionable to non-actionable.
  1. **WTO Notifications**

Please find attached the most recent WTO notifications from countries that are considering changes to their plant import requirements for specific products. If you have any concerns about the notifications being presented please contact [Plant.exports@mpi.govt.nz](mailto:Plant.exports@mpi.govt.nz) so that they can potentially make a submission to the notifying country. Changes notified over the last week include:

* Canada The Canadian Food Inspection Agency (CFIA) has published the final Safe Food for Canadian Regulations on 13 June 2018. The new regulatory framework incorporates existing commodity-based regulations into a single, more outcome-based regulation.
* Korea Carrot seeds for sowing

The embedded files for the last week(which has links through to the original notifications)is available here 

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* 1. **WCO3 Mandatory Date – 9 days to go**

The 1 July 2018 mandatory date for adopting the WCO3-format cargo reporting and clearance messages is Sunday 1 July. An update on the Customs website provides details on what you need to do, and what’s going on with the ICR pilot. [Full article available here](https://www.customs.govt.nz/business/trade-single-window/latest-news/tsw-mandatory-date/)



1. **New Zealand News**



* 1. **New Zealand and EU formally launch free trade talks**

Minister for Trade and Export Growth David Parker and European Union Trade Commissioner Cecilia Malmström have launched negotiations for a free trade agreement between New Zealand and the EU.

The first round of negotiations is expected to take place in Brussels in July.

David Parker said the talks provided a chance to adopt an agreement that would serve as a model for progressive and inclusive trade. The public submissions process will run until 17 August. More information on this process, the FTA and further public events to be held around the country later in the year is available on the [Ministry of Foreign Affairs and Trade website.](https://www.mfat.govt.nz/en/trade/free-trade-agreements/agreements-under-negotiation/eu-fta/eu-nz-free-trade-agreement-overview/) [Full article available here](https://www.beehive.govt.nz/release/new-zealand-and-eu-formally-launch-free-trade-talks)

**General**

* 1. **Horticulture rumbles on**

MPI’s Situation and Outlook Report released at Fieldays shows Hort exports are now $5.4 billion, but are expected to top the magical $6b mark in three years; kiwifruit, wine and apples and pears are the big growth contributors. The report also notes developing new avocado orchards in Northland, the rise of Gold kiwifruit especially in Bay of Plenty, new apple plantings in Hawkes Bay, more stonefruit plantings -- mainly cherries in Central Otago, and more growth in viticulture in Marlborough. “Two million apple trees were planted in the last four years and we have a massive 700ha of kiwifruit to come on top of 500ha that have just gone in,” says acting deputy director-general of policy and trade, Jarred Mair.  [Full article available here](https://www.ruralnewsgroup.co.nz/rural-news/rural-general-news/horticulture-rumbles-on?utm_source=Rural+News+Group+Weekly+E-Newsletter&utm_campaign=f2fcaf4af4-Rural_News_Group_Bulletin_16_January_2018_COPY_02&utm_medium=email&utm_term=0_fb79f8bfe8-f2fcaf4af4-59798541&ct=t(Rural_News_Group_Bulletin_16_January_2018_COPY_02))

**Industry news**

* 1. **NZ biosecurity top - scores in KPMG agribusiness survey**

Biosecurity remained the highest ranked priority for the New Zealand primary sector according to the KPMG Agribusiness Agenda. Biosecurity incursions, environmental challenges, water quality, labour

availability, trade wars and rural infrastructure all featured prominently in discussions with industry leaders. The report said unsurprisingly, against a background of Mycoplasma bovis and myrtle rust, biosecurity remained the number one priority. Delivery of high speed rural broadband was second, and food security was ranked third.

KPMG’s Global Head of Agribusiness, Ian Proudfoot, said last year’s agenda was about opportunities in global markets, whereas this year’s theme was weighted towards a range of domestic issues. Mr Proudfoot added it had been a challenging year for the industry, where the mainstream narrative was predominantly negative despite agri-food continuing to

dominate New Zealand’s export revenues. He noted every New Zealander had contributed to the degradation of the environment, waterways and beaches. Addressing these problems would need whole of community responses. The agenda also highlighted the need to ensure land use plans were optimised in response to community requirements and market expectations.

The Rural sector must fight back, Ian Proudfoot, said the unbalanced narrative surrounding primary industries was no longer an inconvenience or annoyance but was putting the sector at risk and needed to be addressed. This would be done through telling positive stories about the agri-food sector in New Zealand according to the 2018 edition of the KPMG Agribusiness Agenda. It was not only the social licence to operate under threat, but how customers perceived New Zealand products compared to competitors. Mr Proudfoot added the predominant narrative around the sector was costing farmers, growers, processors and their supply chain partner’s real money every day. Farmers commented on the lack of appreciation for what they do in society.

The Agenda noted intensive production systems had impacted ecosystems and caused environmental degradation. KPMG noted entrenched positions on water and irrigation were such that the opportunity to unlock a diversity of higher value land was lost. KPMG suggested the agri-food sector needed to move quickly to a collective commitment over swimmable rivers and lakes.. The KPMG Agribusiness Agenda 2018 is now available for you to download [here](https://home.kpmg.com/nz/en/home/insights/2018/06/agribusiness-agenda-2018.html)

* 1. **Exclusive avocado access to Australia under threat**

Mexico, Peru and Chile are large scale exporters of avocados. They have set their sights on selling into the Australian market, threatening New Zealand's exclusive access to this lucrative market. Australia is New Zealand's number one market for avocados, worth $88 million in sales in the 2017-18 year. Total exports were $105 million.

They also want to sell into New Zealand but it could take some years and would not necessarily result in cheaper avocados, Avocados NZ chief executive Jen Scoular said. “MPI would have to draw up an import health standard and it would have to go through a full risk analysis of pests and diseases. It took us four years to get access into China."

Scoular said while Australia was New Zealand's largest export market, it had been expanding into Asia as an insurance against losing exclusive access, and also because of the growth in Australia's own domestic supply. [Full article available here](http://www.freshplaza.com/article/196727/New-Zealand-Exclusive-avocado-access-to-Australia-under-threat)

**Other**

* 1. **NZ is missing a trick when it comes to export marketing**

The NZ government needs to invest in a national food brand in the same way it spends $100 million each year to promote New Zealand as a tourist destination, says agrifood marketing expert and Lincoln University agribusiness management senior lecturer Nic Lees.

He claims New Zealand producers are not emphasizing the origin of their products, despite research showing most western consumers view New Zealand food as the next best thing to their own products. Lees said New Zealand was not taking advantage of a positive perception of the quality and safety of its food products. [Full article available here](http://www.freshplaza.com/article/196654/NZ-is-missing-a-trick-when-it-comes-to-export-marketing)

* 1. **New Zealand organic farm fined $45,000**

Robinwood Farms, an organic farm near Christchurch, NZ, has been ordered to pay more than $45,000 for exploiting workers it claimed were volunteers. Owner and director Julia Osselton was found to have breached the rights of workers in a bid to avoid legal obligations.

The Employment Relations Authority (ERA) found that Miss Osselton operated under the guise of providing a volunteer experience called 'WWOOFing'; an acronym for World Wide Opportunities on Organic Farms. The Labour Inspectorate says other businesses making use of volunteer workers should take note of the cases, as staff have a right to be paid for all the work they do. It was the second such award made by the ERA against one of Ms Osselton's businesses for her use of volunteers. [Full article available here](http://www.freshplaza.com/article/196836/New-Zealand-organic-farm-fined-45,000)

* 1. **Natalie Davis- new head of Countdown**

Natalie Davis has been appointed as the new Managing Director of Woolworths New Zealand (including Countdown Supermarkets), replacing Dave Chambers who leaves the business at the end of June. Davis starts with Countdown on 2 July, coming from her current role as Chief Customer Transformation Officer for the Woolworths Group.

Australias head of Woolworths says “Natalie’s passion for customers and our team, and the key role she has played in the transformation of our Australian Food business over the last few years, make her an obvious choice.” [Full article available here](http://www.freshplaza.com/article/196780/Meet-the-new-head-of-Countdown-Natalie-Davis)

* 1. **Skincare made from kiwifruit puts Bay of Plenty on the map**

Having established her high end skincare products here in her Bay of Plenty home, Hellen Faulkner is looking to the Chinese market to expand her business. That will put the Bay and New Zealand on the map for products using ingredients from kiwifruit and avocados. [Full article available here](http://www.freshplaza.com/article/196655/Skincare-made-from-kiwifruit-puts-Bay-of-Plenty-on-the-map)



1. **International news**

**Comment**

* 1. **GAIN reports**

Gain reports are from the “Global Agricultural Information Network” and are produced by the USDA. They are designed to provide timely information on the economy, products and issues in foreign countries that are likely to have an impact on United States agricultural production and trade. The information in them is written for USA exporters but the majority is equally relevant to New Zealand. With regard to import regulations for a particular market New Zealand exporters should first check the countries ICPR on MPI’s web site. These are collated specifically for New Zealand product. However the Gain reports often provide additional information that is useful e.g. on grading and labelling, economic profiles. This week see:

1. **Canada Publishes Final Food Safety Regulations** On June 13, 2018, Canada published the final Safe Food for Canadians Regulations, completing a regulatory development process that began in 2012 with the adoption of the Safe Food for Canadian Act.  Canada’s new food safety regulations come into force on January 15, 2019.  [Canada Publishes Final Food Safety Regulations\_Ottawa\_Canada\_6-13-2018](http://gain.fas.usda.gov/Recent%20GAIN%20Publications/Canada%20Publishes%20Final%20Food%20Safety%20Regulations_Ottawa_Canada_6-13-2018.pdf)
2. **China Releases Standard for Maximum Levels of Mycotoxins in Foods**  On March 17, 2017, Chinese departments released the National Food Safety Standard for Maximum Levels of Mycotoxins in Foods (GB 2761-2017), which was implemented on September 17, 2017. This standard sets limits for Aflatoxin B1, Aflatoxin M1, Deoxynivalenol, Patulin, Ochratoxin A and Zearalenone in foods. [China Releases Standard for Maximum Levels of Mycotoxins in Foods \_Beijing\_China - Peoples Republic of\_5-9-2018](http://gain.fas.usda.gov/Recent%20GAIN%20Publications/China%20Releases%20Standard%20for%20Maximum%20Levels%20of%20Mycotoxins%20in%20Foods%20_Beijing_China%20-%20Peoples%20Republic%20of_5-9-2018.pdf)
3. **China Releases the Standard for Levels of Contaminants in Foods** On March 17, 2017, China released the National Food Safety Standard for Maximum Levels of Contaminants in Foods (GB 2762-2017), which was implemented on September 17, 2017. This standard sets limits for lead, cadmium, mercury, arsenic, tin, nickel, chromium, nitrite, nitrate, Benzo[a]pyrene, N-nitrosodimethylamine, polychlorinated biphenyl, 3-chloro-1, 2-propanediol in foods.  [China Releases the Standard for Levels of Contaminants in Foods \_Beijing\_China - Peoples Republic of\_5-9-2018](http://gain.fas.usda.gov/Recent%20GAIN%20Publications/China%20Releases%20the%20Standard%20for%20Levels%20of%20Contaminants%20in%20Foods%20_Beijing_China%20-%20Peoples%20Republic%20of_5-9-2018.pdf)
4. **China Food Service Industry Sector Overview -** China’s Hotel, Restaurant, and Institutional (HRI) sectors recorded USD $539 billion in sales revenue in 2016, a 10.8 percent increase from the previous year. Restaurants accounted for the largest share of the sector with USD $352 billion in sales revenue, or approximately 65 percent of the HRI sector. [Food Service - Hotel Restaurant Institutional\_Beijing ATO\_China - Peoples Republic of\_4-15-2018](http://gain.fas.usda.gov/Recent%20GAIN%20Publications/Food%20Service%20-%20Hotel%20Restaurant%20Institutional_Beijing%20ATO_China%20-%20Peoples%20Republic%20of_4-15-2018.pdf)
5. **UK Retail Foods Report - June 2018** Four supermarket chains hold over 70 percent market share of the UK retail grocery sector. This report provides an overview of UK retail outlets and guidance on how best to place U.S. products in the UK market. [Retail Foods\_London\_United Kingdom\_6-15-2018](http://gain.fas.usda.gov/Recent%20GAIN%20Publications/Retail%20Foods_London_United%20Kingdom_6-15-2018.pdf)

**Regulatory**

* 1. **Trump trade talks create crisis of 'unimaginable proportions'**

By Stephen Jacobi You have to hand it to US President Donald Trump - if his art of the deal is to create a crisis of unimaginable proportions as a means to force an 11th-hour breakthrough, he is very good at it.Fresh from securing "peace in our time" on the Korean peninsula, he now threatens the world with global trade meltdown as he prepares to [implement tariffs on US$50 billion](http://www.radionz.co.nz/news/world/359719/trump-puts-25-percent-tariff-on-chinese-goods) (NZ$72b) or more of Chinese imports. The Chinese are all set to retaliate in kind when - and if - the tariffs are imposed on 6 July.

Just a few weeks ago the president fell out in spectacular fashion with his G7 allies - having at one point raised the prospect of a tariff free, subsidy free zone between them. Now those who should be closest to the US are preparing all sorts of retaliation for US protectionism on steel, aluminium and other products. Calmer heads will point out that the tariffs apply to only about one tenth of Chinese imports and that there is time between now and 6 July for another compromise. We've seen this once already but one wonders whether there is much Chinese trust left in American officials who seem to be so easily disowned by their commander-in-chief.

Trade wars have unforeseen consequences. Tariffs ultimately penalise consumers and industries who use imports as manufacturing imports. They give rise to inflation. They destabilise markets and threaten the viability of the international trade system. The World Trade Organisation (WTO) is already looking decidedly shaky as its ability to adjudicate disputes is curtailed by a lack of judges.

It's telling that large sections of the US business community are aghast at what's going on. The US Chamber of Commerce, the US-China Business Council and even the US Information Technology Industry Council (one of the sectors the president is trying to help) have come out against the tariffs.

What should New Zealand do? We are unlikely given our export profile to be caught up in market disruption in the United States. In China we may even experience some new demand as the Chinese seek to replace US cheese, wine and meat products. The bigger picture though is that as disputes proliferate we could get caught in the crossfire. We are already affected by US tariffs on steel and aluminium. We depend on the WTO to uphold the rule of trade law. We have important markets in both China - where our trade agreement badly needs upgrading - and the US.

We need to press on with our own efforts to free up trade with other key partners such as through trans-pacific partnership and with the European Union. We also need to join with others who are protesting US actions in the WTO. We need to signal clearly that when it comes to our small, trade-dependent economy we believe negotiation and dispute settlement are preferable to fool-hardy protectionism. That's the art of the deal we prefer.[Full article available here](http://www.radionz.co.nz/news/on-the-inside/359864/trump-trade-talks-create-crisis-of-unimaginable-proportions)

* 1. **Things China was going to buy more of ...**

China will put higher tariffs on many of the goods it had earlier indicated it would buy more of, threatening retaliation against US farmers and energy producers for president Trump’s escalation of the trade conflict. Tariffs on 659 items will be raised by 25 percent, according to a final list released by the Ministry of Commerce. The additional duties will hit coal, oil, and food ranging from asparagus to frozen trout and chicken wings. In negotiations with the US earlier this month, China offered to buy about $25 billion more energy and farm products, as a way to shrink the US trade deficit. [Full article available here](http://www.freshplaza.com/article/196649/Things-China-was-going-to-buy-more-of-...)

* 1. **Latest US-China Trade Tensions Will Impact US Produce Trade**

The Trump administration announced it will enact tariffs on an estimated $50 billion worth of imports of Chinese products,. And China promptly hit back with its own list of tariffs on $50 billion worth of US imports. The Chinese retaliatory tariffs came in the form of [a list of more than 500 US products](http://http:/gss.mof.gov.cn/zhengwuxinxi/zhengcefabu/201806/P020180616034361843828.pdf) that starting on July 6 will be subject to a 25% additional tariff.

Among fresh fruits subject to a 25% tariff are cherries, strawberries, apples and citrus (though it should be noted that this seasons' exports to China of US strawberries and cherries may in any case have not been going very well—partly due to a previous [15% retaliatory tariff already in place](http://www.producereport.com/article/china-imposes-tariffs-us-agricultural-products-effective-today), and partly due to reports from industry sources to Produce Report that importers in China, nervous about [ramped up Chinese inspections of US fresh fruit](http://www.producereport.com/article/china-quarantine-authority-orders-stepped-inspections-us-fruit), decided not to buy these highly perishable fruits from the US this season).

According to the Northwest Horticultural Council, 35% of last year's Pacific Northwest sweet cherry crop was exported. China edged out Canada as the top export market, with 5.95 million pounds (2.7 million kg) of imports. China imported $44 million in fresh apples from the US in 2017.

Trump has also placed tariffs on other countries. In response Mexico recently placed tariff on a range of US products in response to the US metal tariffs, including [a 20% tariff on US apples](http://www.producereport.com/article/us-apples-hit-20-retaliatory-tariff-mexico-trade-spat). [Full article available here](Latest%20US-China%20Trade%20Tensions%20Will%20Impact%20US%20Produce%20Trade)

* 1. **Trump Administration Considering 'Tariff Payments' to Farmers**

President Donald Trump’s aides are looking at ways to use the Commodity Credit (CCC), a division of USDA created in 1933, to offer a financial backstop for farmers. Another option is “Section 32” funds. The possible aid would be a way to protect farmers if China and/or other countries officially implement tariffs on U.S. agricultural products.

If U.S. farmers see orders from China plummet because both countries create new layers of tariffs on imports, the White House previously said it wants to set up an assistance program for the U.S. ag sector, including the livestock industry, row crop producers and fruits and vegetable farmers impacted. For example**,** USDA could direct the CCC to purchase soybeans to buoy farmers’ revenues. The CCC is able to assist through loans, purchases, payments and other operations. The CCC Act also authorizes the sale of agricultural commodities to other government agencies and to foreign governments and the donation of food to domestic, foreign, or international relief agencies. [Full article available here](https://www.agweb.com/article/trump-administration-considering-tariff-payments-to-farmers/)

**Business**

* 1. **New Australian digital trading platform**

Fresh produce growers, merchants and buyers can now trade via Phoenicia, a digital marketplace providing unprecedented transparency across the Australian horticulture market. Phoenicia provides access to live sales and market data and real time visibility of supply and demand to deliver growers, buyers and merchants access to reliable and timely information they can trust, accessible via any device with an internet connection.

“By enabling real time visibility of inventory levels including supply and demand as well as historical sales data, this unparalleled level of supply chain insight allows for better planning and optimised operations for both primary production and marketing. The ability to better plan operations including decision support around the type of product grown, through to the scheduling of planting and harvesting we believe will all have a direct positive impact on a grower’s bottom line.

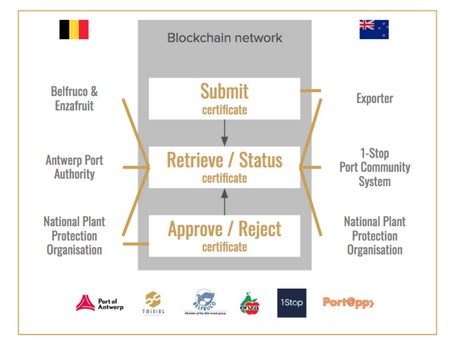
“This level of transparency will change the way industry currently operates. Greater communication will see growers, merchants and buyers working closer together, solidifying long standing relationships whilst providing a pathway into the digital age. “The Centre for Global Enterprise reports digital supply chains have the potential to drive a 20% reduction in procurement expenses, halve supply chain costs and increase revenue by 10%”. [Full article available here](http://www.freshplaza.com/article/196646/New-digital-trading-platform)

* 1. **Antwerp blockchain pilot pioneers: Secure and efficient document workflow**

The Antwerp Port Authority and the Antwerp blockchain start-up T-Mining have developed a solution to make document flows safer and more efficient. Documents, such as certificates of origin and phytosanitary certificates, are transferred via blockchain technology and the document flow is automated by means of so-called "Smart Contracts". Together with Belfruco, Enzafruit, PortApp, 1-Stop and T&G Global, a specific solution was developed for phytosanitary certificates – which  guarantee the safety of fruit and vegetables.

During this pilot project, fruit from New Zealand and destined for the European market is provided with digital phytosanitary certificates that are transferred via blockchain technology. Now, the New Zealand exporter will transfer this digital certificate to the Belgian importer, Enzafruit. It transfers it to Belfruco, freight forwarder within the SEA-invest group - which in turn has to transfer these certificates to the Belgian authorities before releasing the cargo of fruit from the SEA-invest terminal.

At the moment wthe Port of Antwerp are testing this solution on a small scale, with a limited number of parties. We want to test specific blockchain components, but also the new way of working, which is now fully digital. With the results of this pilot we will see which adjustments are needed to consider a possible further roll out."



*How all involved stakeholders will use blockchain to transfer phytosanitary certificates.*

"Thanks to blockchain technology, we are able to transfer the original version of documents fully digitally - rather than forwarding a copy of it," "Compare it to a text file that you email to a person. Both have their own version of the same document, so the question is who has the original version. With important documents such as certificates that guarantee the origin and safety of our food, this is of course a problem. Blockchain technology allows to transfer documents without duplicating them, so there is only one party that owns the original document at any time.

On top, the blockchain guarantees the authenticity of the document – as no one can change or delete anything unnoticed – one of the key characteristics of blockchain. For that, all data is stored decentralized on multiple nodes at various parties such as the Antwerp Port Authority, the Australian & New Zealand Port Community System 1-Stop, Belfruco and T-Mining. Another key characteristic of blockchain technology is that all parties have access to exactly the same data, which is crucial for an efficient process. Today this is a known problem, causing long waiting times. Finally, so-called "Smart Contracts" automate and secure the flow of documents between the various parties, so that certain access rules can be enforced and new information is shared with the parties involved without delay and in a secure manner. Because blockchain is a back-end technology, the Port of Antwerp work together with PortApp, which develops the front-end application so end-users can upload, transfer and approve documents via the blockchain. [Full article available here](http://www.freshplaza.com/article/196703/Antwerp-blockchain-pilot-pioneers-Secure-and-efficient-document-workflow)

* 1. **Breaking the ‘vicious cycle’ of food, climate and nutrition**

According to a report from Chatham House, the food sector was locked in a vicious cycle of increased production, environmental degradation and a mounting of public health crisis. The report was published by the Hoffman Centre and highlighted the challenges facing global food production. The need for vegetation, soils and oceans to be preserved was stressed to prevent catastrophic climate change. Reliance on a limited number of crops, produced in a relatively concentrated area increased food insecurity. A limited number of crops dominated agricultural production and wheat, rice and maize accounted for over half of the world’s calorie consumption. The majority of these crops were produced in the U.S, Brazil, Russia and Ukraine. Government subsidies supported increased production of these crops at the expense of biodiversity and convergence in global diets. The report highlighted key areas of efficiency such as food waste where efficiency gains could be made. The food system was responsible for a toll on human health and failed to deliver nutrition security. [Full article available here](https://www.foodnavigator.com/Article/2018/06/13/The-vicious-cycle-of-food-climate-and-nutrition)

 **Innovation**

* 1. **The influence of IoT: How it’s transforming global logistics**

When someone mentions the Internet of Things (IoT), people often think of smart devices, wearables, or even how your heating at home regulates itself. However, the influence of the IoT goes far beyond that. More specifically, it’s impacting the logistics world and global supply chains.  
  
The IoT is already disrupting the way we think about supply chains, and it’s happening fast. Basically, the IoT provides us with the advantage of using the items that we already have, such as our smartphones, to create more responsive and manageable supply networks. IoT will enable companies to have a wider reach, without all the costs associated with the multiple platforms we needed just a few years ago.

Supply chains are actually prime candidates for IoT applications because they have so many moving parts. Third parties, carriers, and drivers interact with the manufacturer, suppliers, DCs, retailers, and customers as products move. Technologies are already in place to manage disparate parts of the supply chain, but IoT applications can actually bring the disparate parts together to create an information ecosystem that benefits all its participants. In fact IoT applications can collect a vast variety of data types, share it quickly across multiple trading partners, and integrate many sources of information in innovative ways to enable better decision making. It is up to each industry to determine what types of data should be combined and integrated to create that ecosystem. The use of IoT in supply chains is still in its infancy, but it is likely to transform supply chains worldwide. [Full article available here](http://www.floraldaily.com/article/15786/The-influence-of-IoT-How-its-transforming-global-logistics)

* 1. **Fruit and vegetables linked to changes in skin colour**

Skin colour in young Caucasian men is strongly linked to high levels of fruit and vegetable consumption, new research by Curtin University has found. The research, published in the *Journal of Nutrition and Intermediary Metabolism*, suggests that skin colour can be a clear indicator of whether a person has a high intake of fruit and vegetables. This is due to the presence of coloured compounds called carotenoids, found in a wide range of fruit and vegetables. [Full article available here](http://www.freshplaza.com/article/196966/Fruit-and-vegetables-linked-to-changes-in-skin-colour)

* 1. **Creating intelligent plants with botanical sensors**

Dutch technical university TU Delft is conducting research on creating an Internet of Plants with botanical sensors. The idea is that plants equipped with sensors will form a network that communicates previously unavailable information about the plants and their environment.  
  
All kinds of physical, chemical and biological processes take place inside plants. With new sensor technology it will soon be possible to observe these processes directly in the plant. A plant equipped with botanical sensors - the 'cyber plant' - can then provide information about the moisture content, the cell composition and the quality of the crop itself, but also about environmental factors such as soil and air quality, wind speed, solar strength or rainfall. With fast and reliable data on the condition of the plant, crops can be watered and fertilized in a timely manner. [Full article available here](http://www.hortidaily.com/article/43156/Creating-intelligent-plants-with-botanical-sensors)

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